

حمل الآن

مجانا وحصريا

امتحانات رقم (1)

الترم الثاني



Model Exam 1

Total mark

20

Question 1

5

(A) Put (✓) or (X) :

All changes that occur on the Earth's surface take hundreds of years. ()

(B) Give reasons for :

1. There is an energy change when you press the spring of a soap dispenser.

2. Water is considered as renewable resource of energy.

3. Formation of canyons is considered as an example of slow changes.

4. Plants of wetland areas help in formation of deltas.

Question 2

5

(A) Write the scientific term of each of the following :

They are lowland areas in between mountains and have gently sloped sides around rivers. (.....)

(B) What happens if ...?

1. A rock blocks the path of sand that is carried by wind.

2. A river carries sediments meet a sea.

3. Acid rain falls on buildings for a long period of time.

4. You put your hands near the lighted lamp.

Question 3

5

(A) Complete the following sentences :

1. The air moving from an area to another and has a role in breaking down of rocks into smaller particles is known as

2. Some tiny plant-like organisms produce that can dissolve minerals of rocks causing their breaking down.

(B) Mention one example for each of the following :

1. A device which produce thermal energy that don't help it to make its function:

.....

2. Biofuel:

3. Factor affecting mechanical weathering:

Question 4

5

(A) Choose the correct answer :

1. A canyon may take of years to be formed.
a. hundreds b. tens c. millions d. couple
2. When the speed of the water stream that is run over a mountain increases, the rate of erosion will
a. increases. b. decreases. c. become slower. d. be constant.

(B) Mention one importance for each of the following :

1. Windmills:
2. Water in formation of canyons:
3. Solar water heater:

Model Exam 2

Total mark

20

Question 1

5

(A) Choose the correct answer :

Among the changes which are happened very fast, is

- a. formation of deep canyons. b. disappearance of a sandcastle.
c. breaking down of coastal rocks. d. breaking down of mountain rocks.

(B) Give reasons for :

1. Generators are important in electric power stations.

2. Iron in rocks may rust.

3. Trees and other plants are growing on both sides of small canyons.

4. Not all the energy that enters the energy chain completely reaches the device.

Question 2

5

(A) Put (✓) or (X) :

Nile River Delta has a rectangular shape.

()

(B) Compare between :

1.

Points of comparison	Biofuel	Fossil fuel
Renewable or nonrenewable :		
Examples :		

2.

Points of comparison	Mechanical weathering	Chemical weathering
Definition :		
Its effect :	Causes changing of the structure of rocks without any change in	Causes changing of the structure of rocks producing

Question 3

5

(A) Write the scientific term of each of the following :

1. They are deep valleys carved by flowing water. (.....)

2. A process in which the sediments are dropped in a new location by the action of wind, water and gravity. (.....)

(B) Mention one importance or use for each of the following :

1. Battery inside the toy:

2. Generator:

3. Running water in formation of delta:

Question 4

5

(A) Complete the following sentences :

1. Canyon is a special type of that has steep sides.
2. Sand can move forward or backward depending on the direction of

(B) What happens if ...?

1. Water of seas and rivers evaporates, then condenses in the atmospheric air.
.....
2. Potential energy of water increases behind a dam that has water turbines.
.....
3. A water stream flows over a flat land.
.....

Model Exam 3

Total mark

20

Question 1

5

(A) Choose the correct answer :

The breakdown of rocks either mechanically or chemically is called

- a. rusting. b. weathering. c. deposition. d. erosion.

(B) Give reasons for :

1. Global warming occurs due to the increase of burning coal and oil.
.....

2. Formation of a delta when a river meets a sea.
.....

3. Thermal energy in a mobile phone is considered as a wasted energy.
.....

4. A sand dune may be formed in front a large rock in desert.
.....

Question 2

5

(A) Complete the following sentences :

Both of valleys and canyons often have or streams flow through their lowest points.

(B) What happens if ...?

1. To a house that is built close to a river, if the path of the river is changed toward this house.
.....
2. If the remains of sea animals are decomposed under the Earth's surface.
.....
3. To the change of energy when you turn on the television.
.....
4. Lichens growing on rocks produce acids.
.....

Question 3

5

(A) Put (✓) or (X) :

1. Gravity pulls rocks down the mountainsides causing their erosion. ()
2. Water expands and its volume decreases when it freezes. ()

(B) What is meant by ... ?

1. Energy chain :
2. Fossil fuel :
3. Erosion :

Question 4

5

(A) Write the scientific term of each of the following :

1. It is the landform that is formed by erosion and deposition of sand in sandy desert environment. (.....)
2. The two processes that have the main role in the formation of canyon. (.....)

(B) Mention :

1. The importance or use of the following:
 - a. Solar panels :
 - b. Greenhouses :
2. Two factors affecting the shape of the valley:
 - a.
 - b.

Model Exam 4

Total mark

20

5

Question 1

(A) Put (✓) or (X) :

Strong wind and hurricanes carry sand grains for a short distance.

()

(B) What happens if ...?

1. Solar calculators were exposed to the sunlight.

2. A car runs out of fuel while moving.

3. A red-colored rust is formed on some rocks.

4. A river erodes the sediments of a mountain over millions of years.

Question 2

5

(A) Write the scientific term of the following :

It is the process in which the sediments of sand, soil and rocks are moved to other places by wind, water and gravity,

(B) Give reasons for :

1. When you rub your hands together, you feel warm.

2. Sometimes the fuel indicator of a car goes down.

3. Water plays an important role in the formation of limestone caves.

4. The distance that the sand travels depends on the force of the wind.

Question 3

5

(A) Choose the correct answer :

1. The dropping of sediments in a new place, is known as

a. weathering.

b. deposition.

c. freezing.

d. erosion.

2. Lichens produce on rocks that dissolve minerals found in these rocks.
- a. acids b. oxygen c. water d. rain

(B) What is meant by ...?

1. The law of conservation of energy.

.....

2. Fuel.

.....

3. Weather.

.....

Question 4

5

(A) Complete the following sentences :

1. Both of valleys and often have rivers or streams flow through the lowest points.
2. Deltas are formed due to erosion and processes.

(B) Mention one difference between each of the following :

1. Windmills and wind turbines.

.....

.....

2. Solar panels and solar water heaters.

.....

.....

3. Valleys and canyons.

.....

.....

Model Exam 5

Total mark

20



Question 1

5

(A) Complete the following sentence :

Acid rain has an important role in weathering.

(B) Give reasons for :

1. The presence of batteries inside a battery powered clock.

2. Coal and gasoline are considered as non renewable resources of energy.

3. Formation of small sand dunes on a beach.

4. It might be useful to recognize signs of weathering, erosion and deposition.

Question 2

5

(A) Write the scientific term :

A land area that is formed by deposition process when a river enters a lake or a sea. (.....)

(B) Define :

1. Wasted energy.

2. Renewable energy resource.

3. Weathering.

4. Valleys.

Question 3

5

(A) Choose the correct answer :

1. Breaking of statues is an example of

a. deposition.

b. weathering.

c. erosion.

d. sedimentation.

2. Crushing a piece of biscuit by hands is similar to of rocks.

a. mechanical weathering

b. chemical weathering

c. erosion

d. deposition

(B) Cross out the odd word :

1. Electric bulb - Electric heater - Hand bell - Electric iron.

(.....)

2. Oil - Wood - Natural gas - Coal.

(.....)

3. Weathering - Erosion - Deposition - Evaporation.

(.....)

Question 4

5

(A) Put (✓) or (x) :

1. All canyons are similar in shape of rocks and colors.

2. The Grand Canyon in USA is very large and steep.

(B) What happens if ...?

1. Sunlight falls on solar panels.

.....

2. The kinetic energy of a wind that is applied on the wind turbine increases.

.....

3. Heavy rains fall on a small canyon for a longer time.

.....

Model Exam 1

1 (A) (x)

- (B) 1. Because the potential energy stored in its spring is converted into kinetic energy that moves soap upward.
2. Because it can be renewed soon after it is used.
3. Because they are formed due to slow changes that happened to their rocks over many years.
4. Because they help in increasing the rate of deposition process.

2 (A) Valleys.

- (B) 1. Sand dunes may be formed.
2. A delta may be formed.
3. It causes dissolving of rocks used for building.
4. I feel warm, because some electrical energy is converted into thermal energy.

3 (A) 1. wind.

2. acids.

(B) 1. Television.

2. Charcoal.

3. Plant roots.

4 (A) 1. c

2. a

(B) 1. They crushing grain to make flour.

2. When water stream flows over a flat land it may form a small canyons by the effect of weathering and erosion.
3. They heat the water by using solar energy through black pipes on the roof of houses.

Model Exam 2

1 (A) b

- (B) 1. Because generators convert kinetic energy into electrical energy.

2. Due to the reaction between iron and oxygen of air.

3. Due to flow of water stream which is needed by plants to grow.

4. Because some of the energy is wasted in the form of heat.

2 (A) (x)

(B) 1.

Points of comparison	Biofuel	Fossil fuel
Renewable or nonrenewable :	Renewable	Nonrenewable
Examples :	Wood and charcoal.	Natural gas and coal.

2.

Points of comparison	Mechanical weathering	Chemical weathering
Definition :	It is the breaking down of rocks due to the effect of physical factors.	It is the change of the structure of rocks due to chemical reactions.
Its effect :	Causes changing of the structure of rocks without any change in their nature .	Causes changing of the structure of rocks producing new materials .

3 (A) 1. Canyons.

2. Deposition.

(B) 1. It converts chemical energy into electrical energy.

2. It converts the kinetic energy into electrical energy.

3. When a river carries sediments meet a sea, these sediments are deposited forming a delta.

4 (A) 1. valley.

2. wind.

(B) 1. Clouds are formed and rain may fall.

2. It converts into more kinetic energy which causes water turbines rotate faster and generate more electricity.

3. A small canyon may be formed.

Model Exam 3

1 (A) b

(B) 1. Because burning coal and oil produces carbon dioxide gas which forms a layer in atmosphere that traps heat on Earth causing rise in Earth's temperature that causes global warming.

2. Because the sediments are deposited at the end of the river.

3. Because it doesn't help the mobile phone to do its main function.

4. Because the large rock can block the path of sand which is carried by wind.

2 (A) rivers

(B) 1. It causes weathering and erosion of the house.

2. They will form oil or natural gas.

3. The electrical energy is converted into sound energy and light energy.

4. The acids dissolve minerals that are present in these rocks, so rocks become weak and can break down easily.

3 (A) 1. (✓) 2. (✗)

(B) 1. It is a way to describe the flow of energy and its conversion from one form into another.

2. They are fuels formed from remains of plants and animals that were buried and decomposed over long period of time.

3. It is the process in which the small particles of sand, soil and rocks are moved to other places by wind, water and gravity.

4 (A) 1. Sand dune.

2. Weathering and erosion.

(B) 1. a. They generate electricity by using solar energy (especially radiant energy).

b. They help farmers to plant the crops that only grow in warm climate.

2. a. The types of rocks present in this landscape.

b. The speed, age and size of the river in this landscape.

Model Exam 4

1 (A) (✗)

(B) 1. Solar energy is converted into electrical energy that operate them.

2. The car movement decreases gradually until it stops.

3. These rocks become weak and can break down easily.

4. A canyon may be formed.

2 (A) Erosion.

(B) 1. Because the kinetic energy is converted into thermal energy.

2. Because the fuel in the car tank runs out.

3. Because water dissolve minerals in rocks, then these dissolved minerals combine again.

4. Because the strong wind can move the sand for a longer distance than the weak wind.

3 (A) 1. b

2. a

- (B) 1. Energy can neither be created nor destroyed, but only converted from one form of energy into another.
2. It is any substance that produces thermal energy when it is burned.
3. It is the condition of atmosphere at a specific time and place.

4 (A) 1. canyons

2. deposition

- (B) 1. Windmills are used in crushing grains to make flour, while wind turbines are used in generating electricity using the kinetic energy of wind.
2. Solar panels are used in generating electricity by using solar energy, while solar water heaters are used in heating water by using solar energy.
3. Valleys are lowland areas in between mountains, while canyons are the areas that were eroded in mountains.

Model Exam 5

1 (A) chemical

- (B) 1. Because battery is the source of energy where the chemical energy is converted into electrical energy to operate the clock.
2. Because they are used faster than they can be renewed.
3. Because they are formed by the effect of weak winds.
4. Because it may help in building houses in safe places.

2 (A) Delta.

- (B) 1. It is the output energy does not help the device do the function for which it was designed.

2. It is a natural material that can be replaced soon after it is used.
3. It is the breaking down of rocks on Earth's surface into smaller pieces.
4. They are lowland areas in between mountains and have gently sloped sides around rivers.

3 (A) 1. b 2. a

- (B) 1. Hand bell (all items are operated by electrical energy, while hand bell is operated by kinetic energy).
2. Wood (all items are examples of fossil fuels, while wood is an example of biofuels).
3. Evaporation (all items are processes that change the shape of Earth, while evaporation process is not).

4 (A) 1. (✗) 2. (✓)

- (B) 1. The solar energy of the Sun is converted into electrical energy.
2. The blades of wind turbine rotate faster and generates more electricity.
3. The small canyon could get deeper.

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



حمل الآن

مجانا وحصريا

امتحانات رقم (2)

الترم الثاني



Model (1)

20
Marks

1 (A) Complete the following sentence using the words between brackets:

- Mobile phone batteries stores energy. (chemical - electrical)

(B) What happens when ...?

1 You approach your hand near a lighted electric bulb.

.....

2 The dead remains of sea creatures are pressed and exposed to extreme heat and pressure for millions of years.

.....

3 Wind blows weakly in a desert.

.....

4 A flood occurs near a farmland.

.....

2 (A) Put (✓) or (X):

- Canyons are deep valleys that have steep sides. ()

(B) Answer the following questions:

1 Charcoal is considered a biofuel. Why?

.....

2 What are the environmental effects when rain washes chemical pesticides off farmland?

.....

.....

3 Weather is different from weathering. Explain.

.....

.....

4 What are the processes that are responsible for the formation of the opposite land form?

.....



3 (A) Write the scientific term:

1 A force that pulls down the broken rocks along the mountainsides. (.....)

2 The type of weathering where the structure of rocks is changed. (.....)

(B) Answer the following questions:

1 Identify the input and the output energies of a solar heater.

.....

2 Mention the importance of modern wind turbines.

.....

3 Mention two factors which determine the shape of a formed valley.

.....

.....

4 (A) Correct the underlined words:

1 Modern wind turbines have shorter blades than the old windmills. (.....)

2 Sand dunes are constantly stable landforms. (.....)

(B) Give a reason for:

1 Wood is considered as fuel.

.....

2 Erosion and weathering processes are always connected.

.....

3 Breaking down of rocks by water is considered mechanical weathering.

.....

Model (2)

20
Marks

1 (A) Put (✓) or (X):

- Oil and coal are produced from the decomposition of the same remains of dead organisms.

()

(B) What happens when ...?

1 The using of fossil fuel is reduced.

.....

2 Large amounts of silt are deposited along the banks of Nile Delta.

.....

3 Oxygen in air reacts with iron in rocks.

.....

.....

4 Sea waves hit sand on the beaches.

.....

2 (A) Complete the following sentence using the words between brackets:

- Buring of fuel produces energy. (chemical - thermal)

(B) Give a reason for:

1 Natural gas is a nonrenewable energy resource.

.....

2 We must conserve using of fossil fuel.

.....

.....

3 Some small canyons have plants and trees on their sides.

.....

4 Sand dunes are not fixed in their places, but they are always moving.

.....

3 (A) Mention the type of weathering:

1 Breaking down of rocks by the effect of acid rain.

.....

2 Breaking down of rocks due to the change in temperature and cycle of melting and freezing of water.

.....

(B) Answer the following questions:

- 1 Write the energy chain that represents the energy conversions that occur when an electric lamp is turned on.

.....

- 2 Mention the importance of water turbines.

.....

- 3 Explain how Nile delta is formed.

.....

.....

4 (A) Choose the correct answer:

- 1 The on Mars rover curiosity convert solar energy into which is used to recharge the batteries.

a) solar panels - electrical

b) batteries - electrical

c) solar panels – sound

d) batteries - sound

- 2 Dissolving of minerals forming rocks then combine again forming new rocks is an example of

a) mechanical weathering

b) erosion by wind

c) deposition in rivers

d) chemical weathering

(B) Answer the following questions:

- 1 Explain how global warming phenomenon occurs.

.....

.....

- 2 List some ways to conserve fossil fuel.

.....

.....

- 3 Sand dunes are formed as a result of several process, what is the sequence for their formation?

.....

Model (3)

20
Marks

1 (A) Correct the underlined word:

- Most energy chains start with the Moon.

(.....)

(B) Give a reason for:

1 Smog has harmful effect on the human health.

.....
.....

2 Plants of wetlands and their roots help in the formation of a delta.

.....

3 Iron in rocks may rust.

.....

4 The formation of drippings in the limestone caves is considered chemical weathering.

.....
.....

2 (A) Cross out the odd word:

- Charcoal - Gasoline - Liquid fuel from corn - Wood.

(.....)

(B) Answer the following questions:

1 Generators are important in the electric power stations. Mention their importance.

.....

2 Mention the effect of acid rains on the environment.

.....
.....
.....

3 What are the similarities between valleys and canyons?

.....
.....

4 What are the main factors that help in the erosion of weathered rocks?

.....

3 (A) Put (✓) or (X):

1 The output energy of an operating solar panel is light energy.

()

2 Wind and flowing water that carry sand are from the factors of mechanical weathering.

()

(B) Mention the role of ...:

- 1 Concave mirrors in cooking food.

.....

.....

- 2 Lichens in chemical weathering.

.....

.....

- 3 Wind deposition.

.....

4 (A) Complete the following sentences using the words between brackets:

- 1 Hydroelectric energy is generated by (wind - dams)

- 2 The pulls down the weathered rocks along the mountainsides.
(Earth's gravity - wind)

(B) Compare between each of the following:

1

P.O.C	Oil	Water
Type of energy resources		

2

P.O.C	Electric bell	Washing machine
Input		
Output		

3

P.O.C	Canyons	Valleys
Shape		

Model (4)

20
Marks

1 (A) Complete the following sentence using the words between brackets:

- The sound energy produced from an operating washing machine is considered a energy. (waste - useful)

(B) What happens when ...?

- 1 Carbon dioxide reacts with water vapor in the air.

.....

- 2 Shaking a hand bell. (Regarding the energy conversion)

.....

- 3 Plant roots grow in the cracks of rocks.

.....

- 4 A rock blocks the path of flying sand in a desert.

.....

2 (A) Write the scientific term:

- A path that shows the flow of energy from its source to the device. (.....)

(B) Give a reason for:

- 1 The mobile phone gets warm when being used for long time.

.....

.....

- 2 Hydroelectric dams are built on rivers.

.....

.....

- 3 People must not build houses very close to rivers.

.....

.....

- 4 Chemical weathering has stronger effect than mechanical weathering on rocks.

.....

.....

3 (A) Put (✓) or (X):

- 1 Powerplants that use biofuel to generate electricity cause air pollution. ()

- 2 Pulling of sand from the seashores happens due to the erosion process. ()

(B) Define each of the following:

1 Law of conservation of energy.

.....

2 Deposition.

.....

3 Canyons.

.....

4 (A) Cross out the odd word:

1 Solar heater – Hand mixer – Solar panel – Greenhouse. (.....)

2 Plant roots – Oxygen – Temperature changes – wind. (.....)

(B) Answer the following questions:

1 Although trees are a renewable source of energy, we must limit their use.

Explain.

.....

.....

2 What is the effect of smog from cars in big cities on the human health?

.....

.....

3 How do plants that grow in wetlands found in deltas increase deposition process?

.....

.....

Model (5)

20
Marks

1 (A) Write the scientific term:

- A phenomenon where the Earth's temperature increases slowly due to the trapping of heat on Earth. (Global warming)

(B) What happens when ... ?

- 1 The wind rotates the blades of wind turbines.
.....
- 2 The dead remains of plant are pressed and exposed to extreme heat and pressure for millions of years.
.....
- 3 Wind that is carrying sand particles hits a big rock.
.....
- 4 A river erodes the sediments of a mountain over a long period of time.
.....

2 (A) Choose the correct answer:

- All forms of fossil fuel are formed
- | | |
|------------------------------|------------------------------|
| a) above the Earth's surface | b) under the Earth's surface |
| c) above the water surface | d) in the air around us |

(B) Give a reason for:

- 1 You feel warm when you rub your hands together.
.....
- 2 Greenhouses have an important role.
.....
- 3 Acid rain has harmful effects on different living organisms.
.....
- 4 Sand dunes are formed in some places and not formed in others.
.....
.....

3 (A) Complete the following sentences using the words between brackets:

- 1 is a biofuel. (Charcoal - Coal)
- 2 Sand dunes in Rub' Al Khali in Arabian Peninsula are formed by process. (weathering - deposition)

(B) Answer the following questions:

1 Write the energy chain of an operated wind turbine, starting from the Sun.

.....

2 Mention the action of rain when it falls on the soil of farms that locate beside downhill.

.....

3 Compare between

P.O.C	Oil	Coal
Living organism each one is formed from		

4 (A) Put (✓) or (X):

1 Renewable energy resources are replaced faster than they are used. ()

2 Canyons have the same texture, and rock colors. ()

(B) Look at the opposite figure, then answer:

1 What is the opposite factor?

.....

2 What is the effect of this factor on rocks?

.....

3 Does the change happen to rocks quickly or slowly?

.....



Model (1)

20
Marks

1 (A) Complete the following sentence using the words between brackets:

- Mobile phone batteries stores energy. (**chemical** - electrical)

(B) What happens when ...?

1 You approach your hand near a lighted electric bulb.

- **You will feel heat comes from the light bulb.**

2 The dead remains of sea creatures are pressed and exposed to extreme heat and pressure for millions of years.

- **Oil and natural gas are formed.**

3 Wind blows weakly in a desert.

- **Sand will move few meters away.**

4 A flood occurs near a farmland.

- **Sediments and rocks transfer very fast (rapidly) from one place to another.**

2 (A) Put (✓) or (X):

- Canyons are deep valleys that have steep sides. (✓)

(B) Answer the following questions:

1 Charcoal is considered a biofuel. Why?

- **Because it is a fuel that is made from living organisms that can be planted.**

2 What are the environmental effects when rain washes chemical pesticides off farmland?

- **The chemical pesticides cause soil pollution and when the rain falls, they can be carried by water into canals leading to water pollution.**

3 Weather is different from weathering. Explain.

- **Weather is the condition of atmosphere at a specific time and place, while weathering is the breaking down of rocks on the Earth's surface into smaller pieces.**

4 What are the processes that are responsible for the formation of the opposite land form?

- **Erosion and deposition processes.**



3 (A) Write the scientific term:

1 A force that pulls down the broken rocks along the mountainsides. (**Gravity**)

2 The type of weathering where the structure of rocks is changed. (**Chemical weathering**)

(B) Answer the following questions:

- 1 Identify the input and the output energies of a solar heater.
– **Input energy is solar energy, while the output energy is thermal energy.**
- 2 Mention the importance of modern wind turbines.
– **They convert kinetic energy of wind into electrical energy.**
- 3 Mention two factors which determine the shape of a formed valley.
– **The speed of the river.** – **The size and age of the river.**

4 (A) Correct the underlined words:

- 1 Modern wind turbines have shorter blades than the old windmills. (longer)
- 2 Sand dunes are constantly stable landforms. (moving)

(B) Give a reason for:

- 1 Wood is considered as fuel.
– **Because it produces thermal energy when it is burned.**
- 2 Erosion and weathering processes are always connected.
– **Because the eroded rocks must settle down on a surface after they are eroded.**
- 3 Breaking down of rocks by water is considered mechanical weathering.
– **Because the rocks are broken without any change in their structure.**

Model (2)

20
Marks

1 (A) Put (✓) or (X):

- Oil and coal are produced from the decomposition of the same remains of dead organisms.

(X)

(B) What happens when ...?

1 The using of fossil fuel is reduced.

- **Burning of fossil fuel decreases, the amount of carbon dioxide and other pollutants decreases, so acid rain and global warming decrease.**

2 Large amounts of silt are deposited along the banks of Nile Delta.

- **The soil of the Nile Delta will be fertile.**

3 Oxygen in air reacts with iron in rocks.

- **A red-colored rust is formed, causing chemical weathering of rocks that weakens them and breaks them down easily.**

4 Sea waves hit sand on the beaches.

- **The sea waves pull sand away from the beaches leading to beaches erosion.**

2 (A) Complete the following sentence using the words between brackets:

- Buring of fuel produces energy.

(chemical - **thermal**)

(B) Give a reason for:

1 Natural gas is a nonrenewable energy resource.

- **Because it is used faster than it can be replaced.**

2 We must conserve using of fossil fuel.

- **Because fossil fuels are formed over millions of years, so they can't be replaced fast as they are used.**

3 Some small canyons have plants and trees on their sides.

- **Because they may have been formed by water streams.**

4 Sand dunes are not fixed in their places, but they are always moving.

- **Because the force of wind always moves sand from one place to another.**

3 (A) Mention the type of weathering:

1 Breaking down of rocks by the effect of acid rain.

- **Chemical weathering.**

2 Breaking down of rocks due to the change in temperature and cycle of melting and freezing of water.

- **Mechanical weathering.**

(B) Answer the following questions:

- 1 Write the energy chain that represents the energy conversions that occur when an electric lamp is turned on.

– **Electrical energy → Light energy + Thermal energy.**

- 2 Mention the importance of water turbines.

– **They convert the kinetic energy of water to generate electricity.**

- 3 Explain how Nile delta is formed.

– **The Nile River carries sediments, and when the river meets the sea, the sediments are deposited forming the Nile delta.**

4 (A) Choose the correct answer:

- 1 The on Mars rover curiosity convert solar energy into which is used to recharge the batteries.

a) **solar panels - electrical**

b) batteries - electrical

c) solar panels – sound

d) batteries - sound

- 2 Dissolving of minerals forming rocks then combine again forming new rocks is an example of

a) mechanical weathering

b) erosion by wind

c) deposition in rivers

d) chemical weathering

(B) Answer the following questions:

- 1 Explain how global warming phenomenon occurs.

– **When the amount of carbon dioxide gas in the atmosphere increases, it traps heat on the Earth's surface leading to a slow rise in the Earth's temperature.**

- 2 List some ways to conserve fossil fuel.

– **Walking or using bicycles instead of driving cars.**

– **Turn off light and unplug unused devices.**

– **Use renewable energy resources instead of fossil fuel.**

- 3 Sand dunes are formed as a result of several process, what is the sequence for their formation?

– **Weathering → Erosion → Deposition**

Model (3)

20
Marks

1 (A) Correct the underlined word:

- Most energy chains start with the Moon.

(Sun)

(B) Give a reason for:

1 Smog has harmful effect on the human health.

- **Because it causes the irritation of the human's eyes and lungs, and the damage of the respiratory system tissues.**

2 Plants of wetlands and their roots help in the formation of a delta.

- **Because they slow down the river water, and the plants roots help in trapping the sediments that increase the deposition process.**

3 Iron in rocks may rust.

- **Due to the reaction of oxygen with iron of some rocks forming red-colored rust.**

4 The formation of drippings in the limestone caves is considered chemical weathering.

- **Because when water dissolves the minerals in the rocks, they combine again forming new materials with new structure.**

2 (A) Cross out the odd word:

- Charcoal - Gasoline - Liquid fuel from corn - Wood.

(Gasoline)

(B) Answer the following questions:

1 Generators are important in the electric power stations. Mention their importance.

- **They change the kinetic energy into electrical energy.**

2 Mention the effect of acid rains on the environment.

- **The death of trees.**

- **The change in the chemical nature of lakes leading to the death of fish.**

- **The change in the chemical nature of soil.**

3 What are the similarities between valleys and canyons?

- **Both are formed by rivers or streams, and they often have rivers or streams at their bottoms.**

4 What are the main factors that help in the erosion of weathered rocks?

- **Water, wind, and gravity.**

3 (A) Put (✓) or (X):

1 The output energy of an operating solar panel is light energy.

(X)

2 Wind and flowing water that carry sand are from the factors of mechanical weathering.

(✓)

(B) Mention the role of ...:

1 Concave mirrors in cooking food.

– They convert the solar energy into thermal energy, as they collect and focus the sunlight to heat metal pots and cook food inside.

2 Lichens in chemical weathering.

– They produce acids on rocks that dissolve minerals found in these rocks and break them down.

3 Wind deposition.

– When the wind is weak, small sand dunes are formed, while strong wind forms large sand dunes.

4 (A) Complete the following sentences using the words between brackets:

1 Hydroelectric energy is generated by

(wind - **dams**)

2 The pulls down the weathered rocks along the mountainsides.

(**Earth's gravity** - wind)

(B) Compare between each of the following:

1

P.O.C	Oil	Water
Type of energy resources	Nonrenewable energy resource.	Renewable energy resource.

2

P.O.C	Electric bell	Washing machine
Input	Electrical energy	Electrical energy
Output	Sound energy and thermal energy (lost)	Kinetic energy, thermal and sound energies (lost)

3

P.O.C	Canyons	Valleys
Shape	They have steep sides, and are surrounded by narrow vertical walls.	They have gently sloped sides, and are surrounded by wide flat plains.

Model (4)

20
Marks

1 (A) Complete the following sentence using the words between brackets:

- The sound energy produced from an operating washing machine is considered a energy. (waste - useful)

(B) What happens when ...?

- 1 Carbon dioxide reacts with water vapor in the air.
– **Acid rains are formed.**
- 2 Shaking a hand bell. (Regarding the energy conversion)
– **The kinetic energy is converted into sound energy and thermal energy (lost energy).**
- 3 Plant roots grow in the cracks of rocks.
– **The rocks are broken down (Mechanical weathering occurs).**
- 4 A rock blocks the path of flying sand in a desert.
– **Sand dunes are formed.**

2 (A) Write the scientific term:

- A path that shows the flow of energy from its source to the device. (**Energy chain**)

(B) Give a reason for:

- 1 The mobile phone gets warm when being used for long time.
– **Because some electrical energy is lost in the form of thermal energy when the mobile phone operates.**
- 2 Hydroelectric dams are built on rivers.
– **To control the water flow and increase the potential energy of water to generate electricity.**
- 3 People must not build houses very close to rivers.
– **Because the path of rivers may change, causing weathering and erosion of rocks and houses.**
- 4 Chemical weathering has stronger effect than mechanical weathering on rocks.
– **Because chemical weathering changes the structure of rocks producing new materials, while mechanical weathering doesn't.**

3 (A) Put (✓) or (X):

- 1 Powerplants that use biofuel to generate electricity cause air pollution. (X)
- 2 Pulling of sand from the seashores happens due to the erosion process. (✓)

(B) Define each of the following:

- 1 Law of conservation of energy.
– **Energy is neither created nor destroyed, but it is converted from one form to another.**
- 2 Deposition.
– **It is the process of laying down of sediments after their erosion.**
- 3 Canyons.
– **They are deep valleys that are carved by water.**

4 (A) Cross out the odd word:

- 1 Solar heater – Hand mixer – Solar panel – Greenhouse. **(Hand mixer)**
- 2 Plant roots – Oxygen – Temperature changes – wind. **(Oxygen)**

(B) Answer the following questions:

- 1 Although trees are a renewable source of energy, we must limit their use.
Explain.
– **Because cutting down trees at a faster rate than they can grow leads to deforestation leading to negative effects on the environment and also wood will run out.**
- 2 What is the effect of smog from cars in big cities on the human health?
– **It causes irritation of humans' eyes, and irritation of humans' lungs causing the damage of the respiratory system tissues.**
- 3 How do plants that grow in wetlands found in deltas increase deposition process?
– **Plants partly slow down the speed of the river water and the plant roots help in trapping sediments.**

Model (5)

20
Marks

1 (A) Write the scientific term:

- A phenomenon where the Earth's temperature increases slowly due to the trapping of heat on Earth. **(Global warming)**

(B) What happens when ... ?

- 1 The wind rotates the blades of wind turbines.
- **The kinetic energy is converted into electrical energy. (Electricity is generated.)**
- 2 The dead remains of plant are pressed and exposed to extreme heat and pressure for millions of years.
- **Coal is formed.**
- 3 Wind that is carrying sand particles hits a big rock.
- **The sand particles carried by the wind carve the rocks forming different shapes.**
- 4 A river erodes the sediments of a mountain over a long period of time.
- **Valleys and canyons are formed.**

2 (A) Choose the correct answer:

- All forms of fossil fuel are formed
a) above the Earth's surface **b) under the Earth's surface**
c) above the water surface d) in the air around us

(B) Give a reason for:

- 1 You feel warm when you rub your hands together.
- **Because the kinetic energy is converted into thermal energy due to friction.**
- 2 Greenhouses have an important role.
- **Because they help farmers plant crops that only grow in warm climate.**
- 3 Acid rain has harmful effects on different living organisms.
- **Because it chemically changes the structure of the soil that causes the death of trees, chemically changes the structure of lakes causing the death of fish.**
- 4 Sand dunes are formed in some places and not formed in others.
- **Because sand dunes are formed when a barrier like (rocks) blocks the wind-blown sand.**

3 (A) Complete the following sentences using the words between brackets:

- 1 is a biofuel. **(Charcoal - Coal)**
- 2 Sand dunes in Rub' Al Khali in Arabian Peninsula are formed by process. **(weathering - deposition)**

(B) Answer the following questions:

- 1 Write the energy chain of an operated wind turbine, starting from the Sun.
– **Radiant energy → Thermal energy → Kinetic energy → Electrical energy.**
- 2 Mention the action of rain when it falls on the soil of farms that locate beside downhill.
– **It washes away the soil of farms causing its erosion.**
- 3 Compare between

P.O.C	Oil	Coal
Living organism each one is formed from	Decomposition of the remains of marine living organisms (creatures).	Decomposition of dead remains of plants.

4 (A) Put (✓) or (X):

- 1 Renewable energy resources are replaced faster than they are used. (✓)
- 2 Canyons have the same texture, and rock colors. (X)

(B) Look at the opposite figure, then answer:

- 1 What is the opposite factor?
– **Wind carrying sand.**
- 2 What is the effect of this factor on rocks?
– **When wind pushes sand, friction between the sand and rocks causes them to break apart (mechanically weathered).**
- 3 Does the change happen to rocks quickly or slowly?
– **The rocks change slowly.**



حمل الآن

مجانا وحصريا

امتحانات رقم (3)

الترم الثاني



1**Cairo Governorate****Heliopolis Educational Zone****1 (A) Choose the correct answer :**

Lichens produce on rocks that dissolve minerals found in these rocks.

- a. water b. rain c. acid d. oxygen

(B) Give reasons for :

1. Sound energy and thermal energy are considered as wasted energy in the blender.

2. Water is considered as a renewable resource of energy.

(C) 1. What are the factors that affect the shape of the valley.

1.
2.

2. Explain : The law of conservation of energy.**2 (A) Put (✓) or (X) :**

The movement of sediments from one place to another is known as weathering.

()

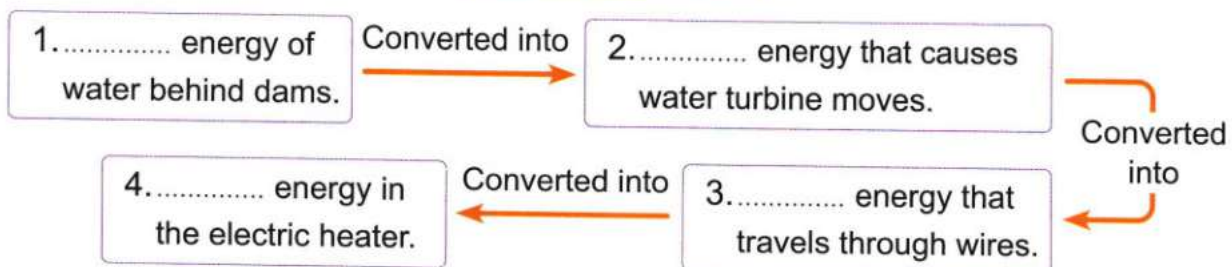
(B) What happens when ... ?

1. The sunlight falls on solar panels.

2. A river carries sediments meet a sea.

(C) 1. Mention the disadvantages of using fossil fuel to produce energy :

1.
2.

2. Complete the following energy chain of the electric heater :

3 (A) Write the scientific term :

Landforms that are made of windblown sand when something like rock blocks the wind. (.....)

(B) Complete :

Forces of and are responsible for the disappearance of sandcastles.

(C) 1. Classify the following into biofuel or fossil fuel :

1. Coal. (.....)
2. Natural gas. (.....)
3. Grass and corn. (.....)
4. Wood. (.....)

2. Explain : The role of oxygen in the chemical weathering.

.....

3. Compare between :

Points of comparison	Water turbine	Solar powered calculator
Source of energy that is used to operate it.		
The produced energy.		

4 (A) Correct the underlined word :

Mechanical weathering is the change of the structure of rocks due to chemical reactions. (.....)

(B) Complete :

..... have great depth, steep and narrow, while have gently sloped.

(C) 1. Write some causes of pollution in the big cities :

1.
2.

2. What is meant by deposition?

.....

3. Write how this landform is formed by writing the name of the processes :

1.
2.



A canyon

2 **Cairo Governorate** **Helwan Educational Zone**

1 (A) Complete the following sentence :

The break down of coastal rocks takes period of time.

(B) Write the scientific term :

1. Mirror is used in cooking food by solar energy. (.....)
2. It is a phenomenon in which the Earth's temperature increases when carbon dioxide gas increases in the air. (.....)
3. It is a hill of sand created by the erosion and deposition of the wind-blown sand. (.....)
4. It is the process of breaking down large rocks into smaller particles. (.....)

2 (A) Correct the underlined word :

The walls of valley are very steep and narrow. (.....)

(B) Answer the following questions :

1. What is the output energy from electric blender ?

2. Mention one example for :

1. Renewable resource of energy :
2. Landform is formed by deposition process :
3. Factor causes chemical weathering :

3 (A) Choose the correct answer from between brackets :

1. cause erosion of sea's beaches. (Wind – Gravity – Sun – Waves)
2. Sand dunes in Western Desert of Egypt are formed as a result of
(floods – wind – waves – streams)

(B) What happens when ...?

1. Operate the solar panels.
.....
2. Consume the fossil fuel in large amounts.
.....
3. Sea waves hit a sandcastle.
.....

4 (A) Put (✓) or (X) :

1. The shape of the valley doesn't be affected by speed of the river and type of the rock. ()
2. There are new substances formed by mechanical weathering. ()

(B) Give reasons for :

1. Mars rover Curiosity operated for a long period of time on Mars without any need to be recharged.
.....
2. Oil is nonrenewable resource of energy.
.....
3. The color of some rocks changes into red.
.....

3**Cairo Governorate****Al-Shorouk Educational Zone****1 (A) Write the scientific term :**

A type of valley.

(.....)

(B) Give reasons for :

1. There is a change in energy when burning wood.
.....
2. Biofuels are renewable sources of energy.
.....

(C) What happens when ... ?

1. Oxygen reacts with iron rocks.
.....
2. Sediments laying down.
.....

2 (A) Complete the following statements :

There are two types of weathering which are and

(B) Answer the following questions :**1. Determine the function of rover Curiosity.**
.....**2. Give examples on biofuels and fossil fuels :**

Biofuels :

Fossil fuels :

3. Mention one different between : The formation of dunes and formation of delta.

- Sand dunes formed by
- Delta formed by

4. Mention the different between : Weathering and deposition

- Weathering :
- Deposition :

3 (A) Choose the correct answer :

1. A canyon is a type of
 a. valley. b. river. c. mountain.
2. moving soil from one place to another.
 a. Weathering b. Erosion c. Deposition

(B) Show the energy pathway from input to output in :

1. TV.

.....

2. Hair dryer.

.....

(C) How were the chemical weathering and mechanical weathering similar ?

.....

4 (A) Put (✓) or (X) :

1. Deltas are formed by weathering. ()
2. Oxygen reacts with iron in rocks to create yellow colored rocks. ()

(B) What happens when ... ?

1. Increase the amount of carbon dioxide in air.

.....

2. The radiant energy enters the greenhouse.

.....

(C) Give a reason for the following :

Weathering and erosion change landforms.

.....

4**Giza Governorate****Al-Agouza Educational Zone****1 (A) Complete the following :**

..... is the process that sediments move from one place to another.

(B) Give reasons for :

1. The rusting of iron in rocks.

.....

2. Hydroelectric dams are built on rivers.

.....

3. Putting a solar panels on Curiosity rover.

.....

4. Fossil fuels are nonrenewable energy resources.

.....

2 (A) Write scientific term :

They are deep valleys carved by flowing water.

(.....)

(B) 1. Mention important of :

1. Concave mirror.

.....

2. Solar heater.

.....

2. Mention the energy transformation in the following :

1. Washing machine.

.....

2. Electric bulb.

.....

3 (A) Put (✓) or (X) :

1. Sand dunes are formed in desert by wind.

()

2. Coal can be used to produce electrical energy.

()

(B) What happens if ... ?

1. A river meets the sea.

.....

2. The charging of toy's battery is run out.

.....

3. The marine organisms are buried under Earth for millions of years.

.....

4 (A) Choose the correct answer :

1. The wasted energy in hair dryer is energy.

a. chemical

b. thermal

c. sound

2. is the oldest biofuel.

a. Wood

b. Natural gas

c. Gasoline

(B) Mention the type of weathering in the following :

1. Formation of limestone caves.

.....

2. The breaking down of rocks by wind.

.....

3. The breaking down of rocks by plant's roots.

.....

5

Giza Governorate

Al-Haram Educational Zone

1 (A) Choose the correct answers :

- The condition of atmosphere including temperature, wind and rains is known as
 a. weather. b. weathering. c. erosion. d. deposition.
- Wadi Nakhr in Oman is formed because water move away by the effect of erosion.
 a. sunlight b. wind c. sediments d. mountains

(B) Correct the underlined words :

- Coal is the main source of most energies on the earth's surface. (.....)
- The high cost of producing energy in windmills is one of its advantages. (.....)
- In the chemical weathering, the chemical structure of rocks doesn't change. (.....)

2 (A) Choose from column (B) what suits it in column (A) :

(A)	(B)
1. Sand dune.	a. A process in which the sediments are dropped in a new location by the action of wind, water and gravity.
2. Deposition.	b. A process in which small broken rocks move from a place to another by the help of wind or water. c. It is the landform that is formed by erosion and deposition of sand in sandy desert environment.

-
-

(B) Mention one example for the following :

- Fossil fuel :
- Renewable resources :
- Factor causes mechanical weathering :

3 (A) Complete the following sentence :

There are two types of weathering which are weathering and weathering.

(B) Write the scientific term :

1. A form of energy produced from the electric lamp and affects our eyes. (.....)
2. Natural resources of energy, that take a short period of time to be renewed. (.....)
3. They are deep valleys carved by flowing water. (.....)
4. A land area that is formed by deposition process when a river enters a sea. (.....)

4 (A) Put (✓) or (X) :

Water and wind are artificial forces that are responsible for the erosion of sea coasts. ()

(B) 1. Give reasons for :

- a. Sometimes the fuel indicator of a car goes down.
-

- b. It might be useful to recognize signs of weathering, erosion and deposition.
-

2. What happens ... ?

- a. If sunlight falls on solar panels.
-

- b. To a small canyon if it rained a lot and water ran through it for a longer time.
-

6 Alexandria Governorate**Borg Al-Arab Educational Zone****1 (A) Complete the following sentence :**

The process of erosion occurs before the process of

(B) Mention two uses of solar energy :

1.
2.

(C) What happens when ... ?

1. The flow of water over the sand.
-

2. Fast flow of water on rocks for a long period of time.
-

2 (A) Write the scientific term :

It's a fan shaped "triangular shape" of mud and some of sediments that forms when the river enters a large body of water. (.....)

(B) Give reasons for :

1. The occurrence of global warming.

.....

2. Generators are important in electric power stations.

.....

3. Delta land has high fertile soil.

.....

4. The disappearances of sandcastle.

.....

3 (A) Put (✓) or (X) in front of the following statements :

1. Chemical weathering has greater effect than mechanical weathering. ()

2. The rust resulting from the chemical weathering of iron increases the hardness of rocks. ()

(B)1. Compare between :

Fossil fuel and biofuel according to the type of energy resource.

a. Fossil fuel : b. Biofuel :

2. What is meant by ... ?

Deposition :

4 (A) Choose the correct answer from the brackets :

1. has high-sloped at the sides. (Valley – Dune – Canyon – Mountain)

2. Wadi Nakhr exists in (Jordan – Oman – Thailand – Egypt)

(B) Follow the energy chain arrangement in the washing machine :

Input : Output :

(C) Determine the type of weathering in :

The reaction of oxygen with iron in rocks.

.....

7

Alexandria Governorate

East Educational Zone

1 (A) Complete the following :

Moving fragments of and sediments around is an example for erosion process.

(B) Write the scientific term :

1. A process that lays down the broken rocks. (.....)

2. Type of weathering occurs by plant roots grow in soil. (.....)

3. A substance release thermal energy when it burned. (.....)

4. The energy does not help contributing the job of the device. (.....)

2 (A) Cross the odd word :

Water turbine – Wind turbine – Washing machine.

(.....)

(B) Mention :

1. One use of concave mirror.

.....

2. An example for large sand dunes in the Arabian Peninsula.

.....

3. One importance of greenhouses.

.....

4. An example for a tiny plant-like produces acid that break down rocks.

.....

3 (A) Put (✓) or (X) :

1. Sandcastle wrecked during a short period of time.

()

2. Oxygen helps in breaking down rocks by chemical weathering.

()

(B) What happens when ... ?

1. Water freezes and melts in the cracks of rocks many times for long periods.

.....

2. Acid rains fall in the water of lakes.

.....

3. The speed of river slows or stops, when river entering the sea.

.....

4 (A) Choose the correct answer :

1. Dissolving minerals forming limestone cave is an example for

a. weathering.

b. deposition.

c. erosion.

d. delta.

2. Steep valleys formed due to the flowing water erosion are called

a. delta.

b. hills.

c. sand dunes.

d. canyons.

(B) Give reasons for :

1. The calculator has solar cells.

.....

2. Wind is a renewable energy source.

.....

3. Water helps in chemical weathering of rocks.

.....

8**Qalyoubia Governorate****Science Inspectorate****1 (A) Write the scientific term :**

The process of breaking down large rocks into small particles. (.....)

(B) Complete the following sentences :

1. The energy stored in batteries is energy.
2. Burning fuel is used as a source of energy.
3. The type of weathering in which the rocks are broken down due to temperature is known as weathering.
4. Canyons differ in their, texture and shape of rocks.

2 (A) Put (✓) or (X) :

Mechanical weathering causes change in shape of rocks without any change in their nature. ()

(B) 1. Give reasons for :

1. You feel warm, when you put your hands near a lighted electric lamp.

2. Lichens break down rocks as they grow.

2. What happens when ... ?

1. The remains of marine (sea) animals are decomposed under the Earth's surface.

2. A river enters a sea or an ocean.

3 (A) Choose the correct answer :

1. Weak winds can form small
 a. delta. b. mountain. c. sand dunes. d. canyon.
2. are lowland areas with gently sloped sides.
 a. Deltas b. Valleys c. Canyons d. Dunes

(B) Mention (Write) each of the following :

1. Output energy in hand bell :
2. Example for biofuel :
3. Name of the most famous canyons :

4 (A) Complete the following sentences by using following words :**(Delta – Hydroelectric dam)**

1. is used to generate to electric energy.
2. is formed by deposition process.

(B) What is the function (importance) of each of the following :

1. Old wind mills.

.....

2. Modern wind turbines.

.....

3. Oxygen in chemical weathering.

.....

9**Menoufia Governorate****Berkat El-Sabaa Educational Zone****1 (A) Choose the correct answer :**

The breaking of rocks into smaller particles without changing their properties is called

- a. deposition. b. erosion. c. mechanical weathering.

(B) Give reasons for :

1. We must turn off lights that we do not need.

.....

2. When you rub your hands together, you feel warm.

.....

3. Iron in rocks may rust.

.....

4. A sand dune may be formed in front a large rock in desert.

.....

2 (A) Complete the following sentences :

Sand is formed due to breaking down of

(B) What happens ... ?

1. If a river carries sediments meet a sea.

.....

2. If decomposition of remains of sea animals under the Earth's surface.

.....

3. To the change of energy when you turn on the television.

.....

4. If wind that is carrying sand particles hits a big rock.

.....

3 (A) Put (✓) or (X) :

1. The nonrenewable resources of energy include coal, gasoline and oil. ()
2. The input energy in a hair dryer is the chemical energy. ()

(B) Correct the underlined words :

1. Light energy is stored inside the battery. (.....)
2. The solar energy produced from the moon. (.....)
3. Delta are formed by erosion and weathering processes. (.....)

4 (A) Complete the following sentences using the words below :

(winds – acids)

1. Lichens produce on rocks that dissolve minerals found in these rocks.
2. The formation of sand dunes in Western Desert in Egypt is due to the movement of

(B) Mention the input and output energies of :

- | | | |
|--------------------|---------------|----------------|
| 1. Elctrical bell, | Input : | Output : |
| 2. Electric iron, | Input : | Output : |
| 3. Elctrical fan, | Input : | Output : |

10

Dakahlia Governorate

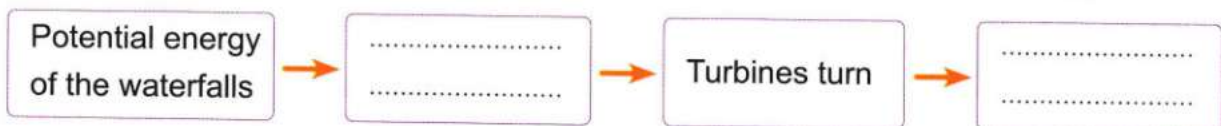
Science Inspectorate

1 (A) Choose the correct answer :

Solar panels generate energy.

- a. solar b. light c. electrical d. chemical

(B) 1. Complete the following model to describe the hydroelectric energy.



2. Mention :

Two examples of landforms formed by effect of erosion and deposition in Egypt are and

2 (A) Complete :

..... are the remains of weathered and eroded rocks that have been deposited.

(B) 1. What is meant by ... ?

1. Fossil fuels :

2. Acid rain :

2. What is the type of weathering ...?

1. Acids that produced by lichens :

2. Melting and freezing of water inside rock cracks :

3 (A) Put (✓) or (X) :

1. Earth's surface features are change by passing time. ()

2. Rivers can lead to weathering and erosion of rocks. ()

(B) 1. What is the result of increasing carbon dioxide in air ?

.....

2.1. Give one example of renewable energy :

2. Choose the odd word :

Water – Sun – Wind – Coal. (.....)

4 (A) Write the scientific term :

1. The process in which the laying down of sediments after their erosion. (.....)

2. The largest canyon in the world and it is from millions of years old. (.....)

(B) 1. Mention the input and output energy in table lamp :

The device	Form(s) of energy in	Form(s) of energy out
Table lamp		

2. What happens when ...?

Oxygen of our atmosphere reacts with iron in rocks.

.....

11**Gharbia Governorate****Science Inspectorate****1 (A) Put (✓) in front of the right statement or (x) in front of the wrong one :**

Deltas are formed as a result of deposition. ()

(B) Mention :

1. One example of biofuel.

.....

2. The main source of energy on Earth's surface.

.....

3. Types of weathering.

.....

4. One factor of mechanical weathering.

.....

2 (A) Put (✓) front of the right statement or (X) in front of the wrong one :

A canyon is a deep valley. ()

(B) What happens if ... ?

1. Coal is burned.

.....

2. The amount of carbon dioxide increases in air.

.....

3. Sediments dropped down.

.....

4. A river carries sediments meet a sea.

.....

3 (A) Complete the following :

1. Canyons are formed by flowing of rivers.

2. Moving sediments from one place to another is process.

(B) Give reasons for :

1. The importance of rover Curiosity.

.....

2. You feel heat when you hold your hand near to a light bulb.

.....

3. The importance of dams.

.....

4 (A) Choose the correct answer :

1. The formation of canyons takes
 a. few minutes. b. few hours. c. many years.
2. The process of breaking down of rocks called
 a. erosion. b. weathering. c. deposition.

(B) Mention :

1. One example of electric device.

2. One example of fossil fuel.

3. The main processes that change Earth surface.

12

Beheira Governorate

Science Inspectorate

1 (A) Complete :

The process of collection and dropping of sediments on Earth's surface is called

(B) Classify the following types of fuel into renewable and nonrenewable :

1. Wood :
2. Natural gas :

(C) 1. Mention :

The wasted energy produced when operating a hair dryer.

2. What happens when ... ?

River water carrying clay sediments meets the sea.

2 (A) 1. Cross out the odd word :

Lichens – Water – Wind – Heat and cold.

(.....)

2. Explain :

The cause of acid rain.

(B) Compare between :

Sand dunes and canyons in terms of formation processes.

(C) 1. What is the importance of concave mirrors ?

2. Who am I ?

A gas that causes acid rain due to its reaction with water vapor.

3 (A) Put (✓) or (X) in front of the following statements :

1. Old windmills are used to generate electricity. ()
2. The output energy of the electric blender is kinetic energy. ()

(B) Mention one evidence of the reaction of oxygen and water with minerals in the rocks ?

.....

(C) 1. Write the scientific term :

Electricity generated from the movement of water. (.....)

2. What is meant by ... ?

Erosion:

4 (A) Choose the correct answer :

1. One of the nonrenewable energy sources is
 a. coal. b. water. c. wind. d. Sun.
2. The canyon located in Egypt is
 a. Small Canyon in Thailand. b. Wadi Rum.
 c. Wadi Nakhr. d. Colored Canyon in Sinai.

(B) Rock erosion occurs under the effect of several factors. Mention one of them ?

.....

(C) Determine the type of weathering (Mechanical or Chemical) in the following cases :

1. Growth of plant roots in rocks. (.....)
2. Dissolving of water for the minerals in rocks. (.....)

13**Ismailia Governorate****Science Inspectorate****1 (A) Choose the correct answer :**

The formation of canyons takes

- a. few days. b. few weeks. c. many weeks. d. many years.

(B) What happens if ... ?

1. Turning on an electric lamp.

.....

2. Lichens growing on rocks produce acids.

.....

3. Water in cracks of rocks freeze and melt several times.

.....

4. Sea creatures were buried under the Earth's surface over millions of years.

.....

2 (A) Write the scientific term :

The process of moving small particles of sediments to another place by wind and water. (.....)

(B) Give reasons for :

1. Water turbines are placed in waterfalls area.
.....

2. Formation of sand dunes on a beach.
.....

3. Iron in rocks may rust.
.....

4. Some electrical devices have solar panels.
.....

3 (A) Put (✓) or (X) :

1. When iron in rock rust, the rock becomes stronger. ()

2. A strong wind carries sediments for long distance. ()

(B) Compare between the following :

1.

Point of comparison	Mechanical weathering	Chemical weathering
One factor of :		

2.

Point of comparison	Hand bell	Electric heater
The produced energy :		

3.

Point of comparison	Coastal rock	Sandcastle
Types of change :	change	change

4 (A) Complete the following sentences using the words between brackets :

1. Sand is formed due to breaking down of

(rocks – glass)

2. are deep valleys carved by flowing water.

(Canyons – Sand)

(B) Mention :

1. The main source of energy.
.....

2. The stored energy in the battery.
.....

3. The process in which dropping of sediments occurs in a new place.
.....

14**Suez Governorate****North Educational Zone****1 (A) Put (✓) or (X) :**

Sand is formed by breaking down of rocks. ()

(B) Write the scientific term :

1. It is a process in which water changes into water vapor. (.....)
2. They are lowland areas in between mountains and gently sloped sides around rivers. (.....)
3. It is any substance which produces thermal energy on burning. (.....)
4. It is the breaking down of rocks on Earth's surface into smaller pieces. (.....)

2 (A) Put (✓) or (X) :

All canyons are similar in shape of rocks and colors. ()

(B) Complete the following sentences :

1. The input energy in an electric bulb is the
2. is the main source of energy in the Earth surface.
3. Sand dunes are formed by process and eroison process.
4. Disappearance of a coastal rocks is an example of change.

3 (A) Choose the correct answer :

1. The condition of atmosphere including temperature, wind and rains is known as
 a. weather. b. weathering. c. erosion. d. deposition.
2. are formed by the effect of the water stream.
 a. Mountains b. Dunes c. Hills d. Canyons

(B) Correct the underlined words :

1. Delta are formed when the speed of river water increases. (.....)
2. Fuel is the substance that produces electrical energy on burning. (.....)
3. Curiosity is a robotic vehicle that is designed to explore the surface of moon. (.....)

4 (A) Complete the following sentences using the words below :

(canyon – oxygen)

1. Chemical reaction between iron and causes its rusting.
2. The wall of are usually very high.

(B) Mention an example of :

1. Biofuel.

2. Renewable resource.

3. Type of weathering.

15 Port Said Governorate

Science Inspectorate

1 (A) Complete the following statement :

Coastal rocks are formed by a period of time.

(B) Give reasons for :

1. There is a change in energy when burning wood.

2. Smog of cars is very dangerous to human health.

3. Some rocks appear red.

4. It might be useful to recognize signs of erosion.

2 (A) Write the scientific term :

The process by which sediments drop down.

(.....)

(B) What happens when ... ?

1. You hold your hand near to light bulb.

2. Cutting down trees.

3. Rocks are broken into smaller pieces.

4. Deposition can not affect landform.

3 (A) Put (✓) or (X) :

1. Canyon formed at a short period of time.

()

2. Gravity is a factor that causes erosion.

()

(B) Determine :

1. The input and output energies in greenhouse.

Input : Output :

2. The input and output energies in solar panels.

Input : Output :

3. One different between the formation of sand dunes and formation of delta.

Sand dunes :

Delta :

4 (A) Choose the correct answer :

1. The rust of rocks is caused by

a. oxygen. b. nitrogen. c. water. d. wind.

2. Sediments help create rivers

a. sand dunes. b. delta. c. dam. d. water.

(B) Mention the name of the following :

1. The main source of energy on the Earth surface.

.....

2. Rising the temperature of Earth.

.....

3. Break the rocks into pieces without any change in their structure.

.....

16**Fayoum Governorate****Science Inspectorate****1 (A) Choose the correct answer from the following :**

What is the process in which the landforms change due to weathering factors?

.....

a. Expansion. b. Weathering. c. Erosion. d. Evaporation.

(B) Complete the following sentences :

1. The energy stored in food is energy.

2. is from renewable fuels.

3. Chemical weathering the structure of rocks.

4. Canyons may differ of each other in

2 (A) Put a sign (✓) or a sign (X) on the following statement :

Fast moving rivers can cause a lot of erosion.

()

(B) Write the scientific term :

1. Fuels that were formed from remains of plants and animals. (.....)
2. Material formed as a result of decomposition of sea creatures. (.....)
3. Landforms that form by the processes of erosion and deposition. (.....)
4. The pieces of weathered rocks that moved from their place. (.....)

3 (A) Complete the following sentences using the given words :**(mechanical weathering – chemical weathering)**

1. Plant roots cause
2. The rust of rocks is caused by

(B) Give reasons for :

1. The waves causes the beach erosion.

.....

2. Burring fossil fuels has many risks to the environment.

.....

3. We should not waste or pollute water.

.....

4 (A) Cross out the odd words :

1. Valleys – Canyons – Deltas. (.....)
2. Deposition – Evaporation – Erosion. (.....)

(B) What happens when ... ?

1. The water was traveling down a steep slope.

.....

2. Turn on electric iron.

.....

3. Rivers run downhill with decreasing speed.

.....

17**Minia Governorate****Bani-Mazar Educational Zone****1 (A) Cross out the odd word :**

- Oxygen – Lichens – Plant roots – Acid rains. (.....)

(B) Correct the underlined words :

1. Watermill is turned when the wind flows. (.....)
2. When the river meets a sea a canyon is formed. (.....)
3. The wasted energy in electric lamp is the light energy. (.....)
4. Strong wind can form small sand dunes on the beaches. (.....)

2 (A) Complete the sentence :

..... is nonrenewable resource of energy.

(B) Write the scientific term :

1. Energy that stored in food or batteries. (.....)
2. A process in which rocks broken down into smaller particles. (.....)
3. Any substance that produces thermal energy when it is burned. (.....)
4. They are deep valley that formed by flowing water. (.....)

3 (A) Put (✓) or (X) :

1. The Nile River Delta has a triangular shape. ()
2. Water and wind can't change Earth's surface. ()

(B) Give reasons for :

1. Hydroelectric dams are built on rivers.
.....
2. Formation of large sand dunes.
.....
3. Concave mirrors are used in cooking food.
.....

4 (A) Choose the correct answer :

1. All the following causing erosion, except
a. water. b. wind. c. gravity. d. sunlight.
2. Deltas are formed by process.
a. weathering b. digestion c. deposition d. photosynthesis

(B) What happens if ... ?

1. Lichens produce acid on rocks.
.....
2. Increasing the amount of carbon dioxide gas in air.
.....
3. Sunlight falls on solar panels. (according to energy change)
.....

18**Luxor Governorate****Luxor Educational Zone****1 (A) Complete using the words between brackets :**

Sand is formed due to breaking down of (wood – rocks – plastic)

(B) Give one example for each of the following :

1. Biofuel :
2. Fossil fuel :

(C) Classify the following to mechanical weathering or chemical weathering :

1. Oxygen reacts with iron of rocks which weaken rocks. (.....)
2. Plant roots grow inside the cracks of rocks. (.....)

2 (A) Cross out the odd word :

Wind – Water – Oil – Solar energy. (.....)

(B) Write the scientific term of the following :

1. It is the breaking down the rocks on Earth's surface into smaller pieces. (.....)
2. The energy produced from a battery. (.....)
3. It is any substance which produced thermal energy when it is burned. (.....)
4. A hill of sand created by the wind. (.....)

3 (A) Put (✓) or (X) :

1. Coal was formed from the sea animals remains. ()
2. The walls of valley are high and steep. ()

(B) 1. Give a reason for the following :

Thermal energy in a mobile phone is considered as a wasted energy.

.....

2. In the table below, classify the following energies in the solar panel.

(Solar energy – Electrical energy)

Input energy	Output energy
.....	

4 (A) Choose the correct answer :

1. When a river meets a sea or lake a is formed.
 a. canyon b. delta c. valley
2. Most energy chains start with the
 a. moon. b. Sun. c. Earth.

(B) What happens if ... ?

1. Acid rain fall on rocks.

2. Water turbines are placed in waterfalls area.

3. You turn on electric bulb. (according to the change of energy)

19

Aswan Governorate

Aswan Educational Zone

1 (A) Choose the correct answer :

1. resources of energy is used faster than it can be replaced.
 a. Renewable b. Nonrenewable c. Electrical d. Water
2. The canyon is considered a special type of
 a. valley. b. sea. c. oceans. d. rivers.

(B) Give reasons for :

1. Lichens may cause breaking down of rocks.

2. The Earth's surface is continuously changing.

3. Charcoal is considered an example for biofuels.

2 (A) Put (✓) or (X) :

1. Coal is considered as the oldest fuel used all around the world. ()
2. Canyon may be formed due to the effect of erosion and deposition. ()

(B) Answer the following questions :

1. Mention two factors of erosion.

2. What are the resources of energy in Mars rover Curiosity ?

3. Mention the type of weathering by plant roots.

3 (A) Complete the sentence :

The wasted energy in electric bulb is energy.

(B) What happens if ... ?

1. There is difference in temperatures of air around Earth.
.....
2. Increasing the amount of carbon dioxide gas and combines with water in the air.
.....
3. Wind that is carrying sand particles hits a big rock.
.....
4. Hitting coastal rocks by the sea waves.
.....

4 (A) Arrange the following steps to generate electricity in electric power station :

- (.....) Water becomes hot and produces steam.
 (.....) Produce electricity.
 (.....) Fuel is burned.
 (.....) Turbine turns the generator.

(B) Write the scientific term :

1. They are lowland areas in between mountains that usually surround a wide, flat plain. (.....)
2. Energy can neither be created nor destroyed. (.....)
3. Process means breaking down of rocks. (.....)
4. A type of the mirrors that is used to heat the pots and cook the food. (.....)

20**Matrouh Governorate****Matrouh Educational Zone****1 (A) Give one example for :**

Chemical weathering :

(B) Write the scientific term for each of the following :

1. The energy produced from batteries. (.....)
2. It is any substance which produced thermal energy on burning. (.....)
3. A process in which a large rock is broken into small pieces. (.....)
4. They are deep valleys carved by flowing water. (.....)

2 (A) Rewrite the statement after correcting the underlined word :

Colored Canyon in Sinai has W-shape.

.....

(B) Complete the following statements :

1. The electric lamp converts electrical energy into and energies.
2. and are examples of fossil fuels.
3. From the factors that cause mechanical weathering and
4. Delta is formed through erosion and processes.

3 (A) Put (✓) or (X) for each of the following :

1. The surface of Earth changes from time to time. ()
2. Sand dunes are formed by erosion only. ()

(B) What happens ... ?

1. To the change of energy when you turn on the television.
-

2. If acid rain falls on building for a long period of time.
-

3. If a river carries sediments meet a sea.
-

4 (A) Choose the correct answer for each of the following :

1. Moving of sediments from a place to another represents process.
 a. weathering b. erosion c. deposition
2. A canyons may take of years to be formed.
 a. tens b. hundreds c. millions

(B) Give reasons for :

1. Humans used watermills from hundreds of years ago.
-

2. Valleys have different shapes.
-

3. Some dams contain water turbines.
-

حمل الآن

مجاناً وحصرياً

امتحانات رقم (4)

الترم الثاني



1 Cairo Governorate – Exam 1

Question (1)

(A) Choose the correct answer:

- The forms of fuel present in car fuel stations are
 - gasoline and wood
 - natural gas and coal
 - wood and coal
 - natural gas and gasoline
- Curiosity Rover is designed to explore
 - Earth
 - Mars
 - the Sun
 - the moon
- Sand is formed by the breaking down of
 - glass
 - wood
 - rocks
 - plastic
- All the following processes change the Earth's surface, except
 - weathering
 - erosion
 - digestion
 - deposition

(B) What happens to a flat land if a water stream flows over it?

Question (2)

(A) Put (✓) or (X):

- ① Both canyons and valleys often have rivers at their bottom. ()
- ② Plants roots help in the formation of rocks. ()
- ③ Energy can't be changed from one form to another. ()
- ④ The Sun is the main source of forming biofuel and fossil fuel. ()

(B) Give a reason for: Iron in rocks may rust.

Question (3)

(A) Complete the following sentences using the words below:

(thermal - gravity - chemical - warm)

- 1 When fossil fuel is burned, it produces _____ energy.
- 2 When we expose our bodies to the Sun, we feel _____.
- 3 Types of weathering can be classified into mechanical weathering and _____ weathering.
- 4 Rain water is pulled downhill forming small stream due to _____.

(B) Cross out the odd word: Solar energy - Coal - Natural gas - Gasoline

2 Cairo Governorate – Exam 2

Question (1)

(A) Choose the correct answer:

- 1 Limestone caves are formed due to the combination of
 a. dissolved minerals b. red-colored rusts
 c. living organisms d. acid rains
- 2 A canyon may take of years to be formed.
 a. hundreds b. tens c. millions d. a couple
- 3 Inside the electric power stations, the heating of produces steam.
 a. turbines b. generators c. water d. fuel
- 4 The energy source in a toy car is the
 a. engine b. tires c. battery d. fuel

(B) What happens if: A river carrying sediments meets a sea?

Question (2)

(A) Put (✓) or (X):

- 1 Global warming is caused by the increase of the oxygen percentage in the atmosphere. ()
- 2 Deposition process never changes the shape of the land. ()
- 3 We have to conserve all forms of fuel. ()
- 4 Electricity generated by wind turbines is transmitted through the wind. ()

(B) Give a reason for: Farmers must reduce the usage of pesticides.

Question (3)

(A) Complete the following sentences using the words below:

(natural gas – sand dune – weathering – valley)

- 1 A is formed when blowing-wind sand hits a rock.
- 2 The is the process in which rocks are broken down to form sediments.
- 3 Some forms of fuel can be used in cooking food, such as wood and
- 4 A is a gently-sloped landform found between mountains.

(B) Cross out the odd word:

Solar energy – Wind energy – Natural gas – Water ()

Question (1)

(A) Choose the correct answer:

- 1 The main source of most of energy on Earth is the
 a. electricity b. Sun c. moon d. wind
- 2 is the process in which sediments are moved to another place on the Earth's surface.
 a. Erosion b. Weathering c. Deposition d. Melting
- 3 Nonrenewable resources of energy include
 a. wood b. gasoline c. grass d. water
- 4 Which of the following factors helps in the formation of sand dunes?
 a. Water b. Wind c. Light d. Heat

(B) What are the types of weathering?

Question (2)

(A) Put (✓) or (X):

- 1 Using fossil fuel protects the environment from pollution. ()
- 2 Mechanical weathering causes a change in the structure of the rocks and a new substance is formed. ()
- 3 The shape of the valley depends on the types of rocks. ()
- 4 The electrical energy that is generated from water is called hydroelectric energy. ()

(B) What are the factors that cause erosion?

Question (3)

(A) Write the scientific term:

- 1 It's a deep valley with steep sides. (.....)
- 2 It is formed from the remains of plants and animals buried for long periods of time. (.....)
- 3 Energy can neither be created nor destroyed; it can only be converted from one form to another. (.....)
- 4 They are built on rivers to control the water flow and increase the potential energy of water. (.....)

(B) Give an example of: A landform that is formed by deposition process.

4 Cairo Governorate - Al-Azhar Al-Sharif

Question (1)

Choose the correct answer:

- _____ is a renewable resource of energy.
 a. Coal b. Natural gas c. Water d. Fossil fuel
- The input energy used to control the Mars exploration vehicle is _____.
 a. electrical energy b. light energy
 c. kinetic energy d. mechanical energy
- Which of the following is an evidence of erosion?
 a. Sand dunes formation b. Forming rocks crumbs
 c. Nile River delta formation d. Breaking of a rock

Question (2)

Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 The Law of Conservation of Energy:	a. is among nonrenewable energy resources.
2 The Sun	b. Energy isn't destroyed, but it can only be converted from one form to another.
3 Wind turbines	c. convert wind energy into electrical energy.
	d. is the main source of energy on Earth.
	e. Energy is destroyed and cannot be transformed from one form to another.

Question (3)

Put (✓) or (X):

- Most valleys are formed due to the erosion of many sediments and their transfer far away. ()
- The formation of sand dunes in Eastern Desert in Egypt is due to the movement of the wind. ()
- The energy produced from the flowing water of waterfalls and dam turbines is called chemical energy. ()

Question (4)

Write the scientific term:

- 1 It's a type of fuel made from living organisms that can be planted.
- 2 It's the energy produced by the blender that helps it do its job.
- 3 It's the process in which rocks are broken into smaller particles.

Question (5)

Complete the following sentences using the words below:

(wood – water – electrical – light – coal – natural gas)

- 1 Ancient people used as a fuel before discovering gasoline.
- 2 is a renewable resource of energy.
- 3 The energy that is produced from solar panels is energy.

5 Giza Governorate – Exam 1

Question (1)

(A) Choose the correct answer:

- In the washing machine, energy is converted into kinetic energy.
a. light b. thermal c. electrical d. potential
- All the following are forms of fossil fuel, except
a. wind b. coal c. natural gas d. oil
- Sand is formed due to the breaking down of
a. glass b. rocks c. plastic d. wood
- The breaking down of large rocks into small particles represents the process.
a. weathering b. photosynthesis c. erosion d. deposition

(B) Give a reason for: The iron in rocks may rust.

Because iron reacts with gas.

Question (2)

(A) Put (✓) or (X):

- Water causes both mechanical and chemical weathering. ()
- A canyon is a type of valleys. ()
- Oil and coal are considered nonrenewable energy resources. ()
- Dams are built on rivers to control the wind flow. ()

(B) What happens if:

A river carrying sediments meets the sea?

Question (3)

(A) Complete the following sentences using the words below:

(Sun – water – sound – biofuel)

- Wind, and gravity are natural factors that control the erosion process.
- Wood and charcoal are examples of
- Most of energy chains start with the
- The output energy of the hand bell is energy.

(B) Cross out the odd word:

Plant roots – Wind – Acid rain – Temperature

(.....)

Question (1)

(A) Put (✓) or (X):

- 1 Energy cannot be transformed from one form to another. ()
- 2 A hand bell converts kinetic energy to sound energy. ()
- 3 The Earth's surface changes from time to time. ()
- 4 When the iron in rocks rusts, the rocks become stronger. ()

(B) Give a reason for: Sand dunes are formed.

Sand dunes are formed due to the effect of

Question (2)

(A) Choose the correct answer:

- 1 Both the hair dryer and the electric water kettle produce energy.
a.chemical b.thermal c.light d.potential
- 2 All the following are renewable energy resources, except
a.natural gas b.water c.the Sun d.wind
- 3 are deep valleys carved by the flowing water.
a.Mountains b.Hills c.Canyons d.Deltas
- 4 Moving the sediments from a place to another represents the process.
a.weathering b.photosynthesis c.erosion d.deposition

(B) Complete: A is a triangle-shaped mass of mud and sediments that forms when a river enters a large body of water.

Question (3)

(A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 Wood	a.is a fossil fuel.
2 Coal	b.is one of the mechanical weathering factors.
3 Acid rain	c.is a biofuel.
4 Temperature	d.is one of the chemical weathering factors.

(B) What happens if: The lichens growing on rocks produce acids?

The rocks will be

7 Giza Governorate – Exam 3

Question (1)

Write the scientific term:

- ① It's the form of energy that is stored in the battery of a remote control. ()
- ② It is a phenomenon in which the Earth's temperature increases when carbon dioxide gas increases in the air. ()
- ③ It's energy that is generated from windmills and transmitted through wires to houses and factories. ()
- ④ They're hills of sand in deserts that are formed by erosion and deposition. ()
- ⑤ They're tiny plant-like organisms that produce acid on rocks, making them break down. ()

Question (2)

Put (✓) or (X):

- ① Energy cannot be transformed from one form to another. ()
- ② Most energy chains start with the moon. ()
- ③ When pedalling a bike, the chemical energy in your body changes to kinetic energy. ()
- ④ There is a stored chemical energy inside the food we eat. ()
- ⑤ Biofuel is a nonrenewable resource of energy. ()

Question (3)

(A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
① Solar panels	a. are used in cooking food.
② Curved mirrors	b. were used to grind grains.
③ Windmills	c. are used to generate electricity.

(B) From the opposite figures:

- ① What is the name of this device?
- ② It changes energy to energy.



8 Qalyubiyya Governorate

Question (1)

(A) Choose the correct answer:

- _____ is the main source of energy on the Earth's surface.
a. Oil b. Gasoline c. Natural gas d. The Sun
- In water turbines, the _____ energy of the water is changed into electrical energy.
a. sound b. kinetic c. thermal d. potential
- _____ is a renewable source of energy.
a. Oil b. Wind c. Coal d. Natural gas
- _____ may cause chemical weathering or mechanical weathering.
a. Oxygen b. Water c. Rocks d. Lichens

(B) Cross out the odd word:

Weathering – Photosynthesis – Deposition – Erosion (_____)

Question (2)

(A) Put (✓) or (X):

- Canyons may take millions of years to be formed. ()
- Most of energy chains start with the moon. ()
- Charcoal is formed from the decomposition of the remains of ancient plants. ()
- Biofuel is a nonrenewable resource of energy. ()

(B) Write the scientific term:

It's a kind of weathering that changes the structure and color of rocks.

Question (3)

(A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 A greenhouse	a. are used to generate electricity from solar energy.
2 A valley	b. usually has a triangular shape.
3 A delta	c. has gently-sloped sides.
4 Solar panels	d. helps to grow crops that only grow in warm climates.

(B) Give an example of: A fossil fuel.

9

Alexandria Governorate – Exam 1

Question (1)

(A) Choose the correct answer:

- 1 Energy isn't destroyed nor created from nothing. This indicates
 a. the drawing of energy resources
 b. the conservation and transformation of energy
 c. that the resources of energy are numerous
 d. the destruction of energy resources
- 2 is a resource that we consume at a faster rate than its formation in nature.
 a. Wind b. Water c. Solar energy d. Fossil fuel
- 3 Dissolving minerals from rocks and recombining them with new substances is an example of
 a. mechanical weathering b. weathering by wind
 c. deposition in rivers d. chemical weathering
- 4 The steep valleys that are formed due to the flowing water erosion are called
 a. canyons b. sand dunes c. hills d. delta

(B) Give a reason for:

The roots of trees can be an agent for shaping the Earth's surface.

Question (2)

(A) Complete the following sentences:

- 1 The output energy of the hair dryer that helps it do its function is energy.
- 2 In large cities, pollution with causes irritation in the eyes and lungs.
- 3 Types of weathering are weathering and chemical weathering.
- 4 After rocks weathering, the process of occurs and the sand and soil move to another place.

(B) What happens if:

Oxygen gas reacts with iron rocks forming red-colored rust?

Question (3)

(A) Put (✓) or (X):

- 1 Both a canyon and a valley often have rivers or streams that flow through their lowest point. ()
- 2 All the changes to Earth's surface take hundreds of years. ()
- 3 Wind and solar energy are nonrenewable energy resources. ()
- 4 Mars Rover robot uses the same energy used in a remote-controlled toy car. ()

(B) Write the scientific term: Gasoline - Coal - Natural gas (.....)

10 Alexandria Governorate – Exam 2

Question (1)

(A) Complete the following sentences using the words below:

(copper - Sun - electric lamp - charcoal)

- 1 Wood and are examples of biofuel.
- 2 Most of energy chains start with the
- 3 The device used to convert electrical energy into light energy is the
- 4 Electric wires are made of

(B) Put (✓) or (X): The burning of gasoline produces heat energy. ()

Question (2)

(A) Choose the correct answer:

- 1 All the following are processes that can change the Earth's surface, except for
 a. digestion b. erosion c. weathering d. deposition
- 2 and cause mechanical weathering.
 a. Plant's roots, acid rain b. Lichens, water
 c. Oxygen, water d. Water, plant's roots
- 3 Oil is a nonrenewable energy resource that is used inside the
 a. flashlight b. car engine
 c. electric fan d. washing machine
- 4 Curiosity Rover is used to explore
 a. Earth b. Mars c. the Sun d. the moon

(B) Write the scientific term:

It's the energy produced from playing the guitar. (.....)

Question (3)

(A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 Water	a. is formed from the remains of dead plants.
2 Wind energy	b. is the main source of energy on Earth.
3 Coal	c. is a liquid renewable resource of energy.
4 The Sun	d. is used to generate electricity through wind turbines.

(B) Give a reason for: The iron in rocks may rust.

11 Alexandria Governorate – Exam 3

Question (1)

(A) Choose the correct answer:

- 1 When you use the hand bell, energy changes into sound energy.
a. light b. thermal c. kinetic
- 2 When a rock blocks the path of flying sand, a may be formed.
a. dune b. river c. canyon
- 3 is a renewable resource of energy
a. Coal b. Natural gas c. Water
- 4 A canyon may take of years to be formed.
a. tens b. hundreds c. thousands

(B) Give a reason for:

We must turn off the lights that we don't need for a while.

Question (2)

(A) Cross out the odd word:

- 1 Erosion - Weathering - Digestion - Deposition (.....)
- 2 Wood - Natural gas - Gasoline - Glass (.....)
- 3 Acid rain - Wind - Plant root - Temperature (.....)
- 4 Fossil fuel - Waterfalls - Wind - Sunlight (.....)

(B) What happens if:

The lichens growing on rocks produce acids?

Question (3)

(A) Put (✓) or (X):

- 1 Both canyons and valleys often have rivers in their bottom. ()
- 2 Solar cells are composed of many solar panels. ()
- 3 Mars is located a few meters away from Earth. ()
- 4 There is a stored chemical energy inside the food we eat. ()

(B) Write the scientific term:

It's any substance that produces thermal energy when it is burned. (.....)

12 Dakahlia Governorate

Question (1)

(A) Complete the following sentences:

- 1 Light energy is converted into energy, which is stored in the form of sugar inside the trees.
- 2 is used as a source of thermal energy in homes and cars.
- 3 are deep valleys carved by the flowing water.
- 4 is the process of laying down sediments after their erosion.

(B) What happens if: Acidic rain falls on rocks?

Question (2)

(A) Put (✓) or (X):

- 1 Using solar energy is a way to conserve fossil fuel. ()
- 2 Water is a nonrenewable resource that is used to generate hydroelectric energy. ()
- 3 Acid rain is formed when carbon dioxide dissolves in the water found in the air. ()
- 4 Deforestation is caused by the overuse of fossil fuel. ()

(B) What is the role of wind in mechanical weathering?

Question (3)

(A) 1- Write the scientific term:

- 1 Energy is neither created nor destroyed; it can only be converted from one form to another. (.....)
- 2 It's a gas in the air that combines with the iron in some rocks and causes its weakness. (.....)

2- Complete the following table:

Device	Input Energy	Output Energy
1 Electric heater		
2 Battery in your toy		

(B) Give a reason for: Dams are built on rivers.

13 Suez Governorate

Question (1)

(A) Choose the correct answer:

- 1 Curiosity Rover is designed to explore
 a. Earth b. Mars c. the Sun d. the moon
- 2 Which form of energy is not used or produced when you turn on an electric bulb?
 a. Light energy b. Heat energy c. Electrical energy d. Sound energy
- 3 The formation of canyons takes
 a. a few minutes b. a few hours c. a few days d. many years
- 4 Gentle wind can carry sand grains for distances
 a. short b. long c. huge d. large

(B) Give a reason for: Iron in rocks may rust.

Question (2)

(A) Put (✓) or (X):

- 1 Wind can be considered one of the factors that cause weathering. ()
- 2 The Earth's surface never changes. ()
- 3 In a modern wind turbine, kinetic energy is converted into chemical energy. ()
- 4 The Sun is the main source of energy on Earth. ()

(B) Cross out the odd word: Gasoline - Charcoal - Coal - Natural gas

Question (3)

(A) Complete the following sentences using the words below:

(gently - renewable - Oil - deposition)

- 1 The sides of the canyon at the beginning of its formation are sloped.
- 2 is a nonrenewable source of energy.
- 3 Using the resources of energy costs more money.
- 4 The process of laying down sediment after their erosion is called

(B) What happens if: A river that carries sediments meets the sea?

14 Port Said Governorate

Question (1)

(A) Choose the correct answer:

- 1 Fossil fuel needs to be formed under the Earth's surface.
a. five years b. ten years c. hundreds of years d. millions of years
- 2 Water flows through the turbines in the dams to generate energy.
a. electrical b. potential c. solar d. light
- 3 When a river meets a sea or an ocean, a landform known as a is formed.
a. canyon b. volcano c. mountain d. delta
- 4 If the rain falls over a canyon for several times per year,
a. its depth increases b. its depth decreases
c. it becomes flat d. it won't be affected

(B) Write the scientific term:

It's a process in which rocks are broken down into smaller particles. (.....)

Question (2)

(A) Put (✓) or (X):

- 1 Most energy chains start with the moon. ()
- 2 You need gasoline to move a bicycle. ()
- 3 Deposition process never changes the shape of the land. ()
- 4 Wind can pick up sand grains and form sand dunes. ()

(B) Give a reason for: Iron inside rocks may rust.

Question (3)

(A) Correct the underlined word:

- 1 Curiosity is a robotic vehicle that is designed to explore the surface of the moon.
- 2 Hydroelectric energy is a nonrenewable energy resource.
- 3 The origin of sand is the breaking down of some types of glass.
- 4 When the water of a river travels downhill on a steep slope, its speed decreases.

(B) What happens if:

A river erodes the sediments of a mountain over a long period of time?

15 Behira Governorate

Question (1)

(A) Choose the correct answer:

- 1 The stored energy inside the battery of a mobile phone is energy.
a. electrical b. light c. chemical
- 2 Fossil fuel is considered a resource of energy.
a. renewable b. nonrenewable c. permanent
- 3 is the breaking down of rocks into small particles by physical factors.
a. Mechanical weathering b. Chemical weathering c. Erosion
- 4 The process in which small particles of sand, soil and rocks are moved from a place to another is
a. weathering b. erosion c. deposition

(B) Write the scientific term:

Energy is neither created nor destroyed.

(.....)

Question (2)

(A) Put (✓) or (X):

- 1 A spacecraft takes about 6 seconds to go to Mars. ()
- 2 Most of the energy we use is produced from the Sun. ()
- 3 Some types of plants can be used to make a liquid fuel. ()
- 4 The roots of trees can make rocks break down. ()

(B) What are the effects of the smog from cars on humans' health?

Question (3)

(A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1 Sand dunes	a. are special types of valleys that have steep sides.
2 Canyons	b. are pieces of rock that break down due to weathering and move from their place by the effects of gravity and other factors of transportation.
3 Valleys	c. formed due to windblown- sand.
4 Sediments	d. lowland area between mountains.

(B) Write the scientific term: It's the device in electric power stations that converts kinetic energy into electrical energy. (.....)

Government Model

Exams Answers

1 Cairo Governorate – Exam 1

Question 1

(A) 1 d 2 b 3 c 4 c

(B) A small canyon may be formed.

Question 2

(A) 1 ✓ 2 x 3 x 4 ✓

(B) Due to the reaction with oxygen causing chemical weathering.

Question 3

(A) 1 thermal 2 warm
3 chemical 4 gravity

(B) Solar energy

2 Cairo Governorate – Exam 2

Question 1

(A) 1 a 2 c 3 c 4 c

(B) The sediments will be deposited forming a delta.

Question 2

(A) 1 x 2 x 3 ✓ 4 x

(B) Because they mix with the water in the canals causing water and soil pollution.

Question 3

(A) 1 sand dune 2 weathering
3 natural gas 4 valley

(B) Natural gas

3 Cairo Governorate - Zeitoun Zone

Question 1

(A) 1 b 2 a 3 b 4 b

(B) Chemical weathering - Mechanical weathering

Question 2

(A) 1 x 2 x 3 ✓ 4 ✓

(B) Wind, water, and the gravity

Question 3

(A) 1 Canyon 2 Fossil fuel
3 Law of Conservation of Energy
4 Dams

(B) Delta

4 Cairo Governorate - Al-Azhar Al-Sharif

Question 1

1 c 2 b 3 b

Question 2

1 b 2 d 3 c

Question 3

1 ✓ 2 ✓ 3 x

Question 4

1 Biofuel
2 Kinetic energy 3 Weathering

Question 5

1 wood 2 Water
3 electrical

11 Alexandria Governorate - Exam 3

Question 1

- (A) 1 c 2 a 3 c 4 b

(B) To conserve electricity.

Question 2

- (A) 1 Digestion 2 Glass
3 Acid rain 4 Fossil fuel

(B) Acids will eat away rocks so they become weaker and are broken down easily.

Question 3

- (A) 1 ✓ 2 x 3 x 4 ✓

(B) Fuel

12 Dakahlia Governorate

Question 1

- (A) 1 chemical 2 Natural gas
3 Canyons 4 Deposition

(B) It will dissolve the minerals in the rocks, so the rocks become weaker and break down easily.

Question 2

- (A) 1 ✓ 2 x 3 ✓ 4 x

(B) Friction occurs between sand grains carried by wind and rock. This causes smoothing of rocks and breaking them down.

Question 3

- (A) 1- 1 Law of Conservation of Energy
2 Oxygen gas
2- 1 Electrical energy - Thermal energy
2 Chemical energy - Kinetic energy

(B) To control the water flow and increase its potential energy.

13 Suez Governorate

Question 1

- (A) 1 b 2 d 3 d 4 a

(B) Because it reacts with the oxygen of the air.

Question 2

- (A) 1 ✓ 2 x 3 x 4 ✓

(B) Charcoal

Question 3

- (A) 1 gently 2 Oil
3 renewable 4 deposition

(B) A delta will be formed.

14 Port Said Governorate

Question 1

- (A) 1 d 2 a 3 d 4 a

(B) Weathering

Question 2

- (A) 1 x 2 x 3 x 4 ✓

(B) Because iron reacts with oxygen.

Question 3

- (A) 1 Mars 2 renewable
3 rocks 4 increases

(B) A canyon will be formed.

15 Behira Governorate

Question 1

- (A) 1 c 2 b 3 a 4 b

(B) Law of Conservation of Energy

Question 2

- (A) 1 x 2 ✓ 3 ✓ 4 ✓

(B) Irritation of eyes and lungs -

Damage of lungs - Heart diseases

Question 3

- (A) 1 c 2 a 3 d 4 b

(B) Generator

5 Giza Governorate – Exam 1

Question 1

(A) 1 c 2 a 3 b 4 a

(B) oxygen

Question 2

(A) 1 ✓ 2 ✓ 3 ✓ 4 x

(B) Sediments will be deposited forming a delta.

Question 3

(A) 1 water 2 biofuel

3 Sun 4 sound

(B) Acid rain

6 Giza Governorate – Exam 2

Question 1

(A) 1 x 2 ✓ 3 ✓ 4 x

(B) the erosion and deposition of the wind-blown sand

Question 2

(A) 1 b 2 a 3 c 4 c

(B) delta

Question 3

(A) 1 c 2 a 3 d 4 b

(B) weaker and break down easily.

7 Giza Governorate – Exam 3

Question 1

- 1 Chemical energy
- 2 Global warming
- 3 Electrical energy
- 4 Sand dunes 5 Lichens

Question 2

1 x 2 x 3 ✓ 4 ✓
5 x

Question 3

(A) 1 c 2 a 3 b

(B) 1 Solar water heater
2 solar – thermal

8 Qalyubiyya Governorate

Question 1

(A) 1 d 2 b 3 b 4 b

(B) Photosynthesis

Question 2

(A) 1 ✓ 2 x 3 x 4 x

(B) Chemical weathering

Question 3

(A) 1 d 2 c 3 b 4 a

(B) Oil - Natural gas

9 Alexandria Governorate – Exam 1

Question 1

(A) 1 b 2 d 3 d 4 a

(B) As they grow inside rock cracks, the cracks become wider, causing breaking down of rocks.

Question 2

(A) 1 thermal 2 smog
3 mechanical 4 erosion

(B) It will cause chemical weathering.

Question 3

(A) 1 ✓ 2 x 3 x 4 x

(B) Fossil fuel

10 Alexandria Governorate – Exam 2

Question 1

(A) 1 charcoal 2 Sun
3 electric lamp 4 copper

(B) ✓

Question 2

(A) 1 a 2 d 3 b 4 b

(B) Sound energy

Question 3

(A) 1 c 2 d 3 a 4 b

(B) Because it reacts with oxygen.

حمل الآن

مجانا وحصريا

امتحانات رقم (5)

الترم الثاني



Science

Exam

1

1

A) Complete the sentence:

- The remains of and turned to coal by being exposed to temperature and pressure under the Earth's surface.

B) Give a reason for each of the following:

- (1) Sound energy and thermal energy are considered wasted energy in the car.
▶
- (2) Biofuels will never run out if used sustainably.
▶
- (3)  Sea waves damage sand castles.
▶
- (4) The seeds of the plants can be a part of mechanical weathering.
▶

2

A) Write a scientific term:

-  A land area that is formed by the deposition process when a river enters a sea.
(.....)

B) What happens when...?

- (1)  Oxygen reacts with iron rocks.
▶
- (2) We ride a bike (in terms of energy conversion).
▶
- (3)  The flow of water over sand.
▶
- (4)  The remains of animals are decomposed under the earth's surface.
▶

3

A) Put (right) or (wrong):

- (1) Chemical weathering causes a change in the shape of rocks without any change in their nature. (.....)

(2) Liquid fuel is formed from the corn and switch grass. ()

B) Mention:

- (1) The difference between the energy input and the energy output.
- ▶
- (2) The difference between mechanical and chemical weathering.
- ▶
- (3) Factors that cause chemical weathering. ▶

4 A) Choose the correct answer:

- (1) Dissolving minerals forming a limestone cave is an example of:
- (a) weathering (b) deposition (c) erosion (d) delta
- (2)  The energy produced by radio reflects its main function: energy.
- (a) Electric (b) Sound (c) Light (d) Chemical

B) Compare between wind turbines and windmills in terms of:

Wind turbines	Windmills
Definition	
.....	
.....	
Differences	
.....	
.....	
Similarities	
.....	
.....	

Science

Exam

2

1 A) Complete the sentence:

-  Potential energy of the waterfalls is converted into energy.

B) Mention Ways to conserve fossil fuels.

- ▶
- ▶

C) Give a reason for each of the following:

- (1) There is a relation between weathering and erosion.

- ▶

- (2) It is better for any country to build dams on its rivers.

- ▶

- (3) Chemical weathering can be done by water.

- ▶

2 A) Choose the correct answer:

- The canyon located in Egypt is

(a) Small Canyon (b) Wadi Rum (c) Wadi Nukhr (d)  Colored Canyon

B) What happens if...?

- (1)  Sediments drop down.

- ▶

- (2) A river carries sediments to meet a sea.

- ▶

- (3) Overfishing of fish.

- ▶

- (4) Lichens have a role in weathering.

- ▶

3 A) Correct the underlined word:

- (1)  Colored canyons have a W-shape .

(.....)

- (2)  Strong winds can form small sand dunes on the beaches.

(.....)

B) What are the consequences of:

- (1)  Breaking down of rocks .

▶

- (2) Moving turbines with water. ►
- (3)  Sediments settling. ►

4 A) Put (✓) or (X):

- (1)  The increase in the water flow leads to a decrease in erosion. ()
- (2) Wind turbines, unlike windmills, are used to generate electricity. ()

B) The erosion process happens in many places. Explain.

►

C) What is the main drawback of producing energy from renewable resources?

►

D) Is Delta as a landform a result of mechanical, chemical weathering, or deposition?

►

Science

Exam

3

1 A) Choose the correct answer:

-  Which of the following is evidence of erosion?
 - (a) Sand dune formation
 - (b) Forming rock crumbs
 - (c) Nile delta formation
 - (d) Formation of sedimentary rock

B) Give a reason for each of the following:

- (1)  When rocks are weathered, they break down into smaller pieces and are transported to a distant place.
-
- (2) Deposition is the final stage for broken rocks. ►
- (3) Charcoal is considered an example of biofuels. ►
- (4)  The smog of cars is very dangerous to human health.
-

2 A) Complete the following statements:

-  Fast-moving rivers can cause a lot of

B) What challenges might people face when using solar panels?

►

C) Are all canyons the same? What are the differences and similarities?

►

D) Explain: gravity has an important role in the formation of canyons.

▶

E) Define: pollution.

▶

3 A) Use the following words to fill in the blanks:

Canyons - Sand dunes - Rivers - Wind

(1)  are deep valleys with steep sides.

(2)  are hills that are made of sand.

B)  How does the wind affect the sand?

▶

C)  What kinds of energy transfer must occur from the sun to power a cell phone?

▶

D) Mention the main processes that change the Earth's surface.

▶

4 A) Write a scientific term:

(1)  Landforms that are formed by the processes of erosion and deposition.

(.....)

(2)  A path that shows the flow of energy from the source to the tool used.

(.....)

B) What happens...?

(1) Rivers dry up. ▶

(2) When sunlight falls on solar panels. ▶

C) Explain how the hydroelectric dam works.

▶

▶

Science

Exam

4

1 A) Choose the correct answer:

• winds can form small sand dunes.

(a) Great

(b) Big

(c) Weak

(d)  Strong

B) Give reasons for:

(1) Oil is one of the non-renewable sources of energy.

▶

- (2)  The Delta land has highly fertile soil. ▶

C) Mention the following:

- (1) The causes of global warming. ▶
- (2) Risks of smog emitted from automobiles. ▶
- ▶

2 A) Write how each landform is formed:

- (1)  Canyons and valleys:
- (2)  Delta:

B) What happens when...?

- (1) Waves crash on the beach. ▶
- (2) The toy's battery runs out. ▶
- (3) The radiant energy enters the greenhouses. ▶

C) Determine the function of the Mars rover Curiosity.

▶

3 A) Write a scientific term:

- (1) A large canyon that is formed by environmental factors over time, located in Oman (.....)
- (2)  Very fine bits of sand, clay, or rock material. (.....)

B) How do rocks or plants affect the formation of sand dunes?

▶

C) Describe how sand dunes are formed and why they are considered a landform of erosion.

▶

D) How do solar heaters help us reducing pollution?

▶

4 A) Put (right) or (wrong):

- (1) Most caves are formed due to chemical weathering. (.....)
- (2)  The cycle of melting and freezing continues until rock breaks. (.....)

B) Imagine you are a geologist, how would you explain the formation of the Grand Canyon?

▶

C) Why does a canyon take a long time to form?

▶

D)  Compare water and wind to generate electricity.

Water ▶

Wind ▶

Science Exam 5

1 A) Complete the sentence:

- and are examples of fossil fuels.

B) Give reasons for:

- (1) Using the Mars Rover Curiosity. ▶
- (2) There are a lot of environmental risks from using fuel to get electricity.
▶
- (3) Formation of sand dunes in a desert. ▶
- (4)  Iron in rocks may rust. ▶

2 A) Choose the correct answer:

-  At the convergence of flowing river water that carries clay and sand sediments with the sea, a landform called is formed.

(a) Delta (b) Sand dunes (c) Dams (d) Canyons

B)  What happens...?

- (1) From the differences in temperature of the air around the Earth.
▶
- (2) If turbines and generators are stopped in dams.
▶
- (3) When we turn on the stove. ▶
- (4) If we stop building dams. ▶

3 A) Define:

- (1) Energy ▶
- (2) The law of conservation of energy. ▶
- (3) Deposition ▶
- (4) What happens when rivers run downhill? ▶

B) Match each of the following:

Column (A)	Column (B)
1 Biofuel	Dead sea animals a
2 Fossil fuels	Switch grass, wood, chips, and corn b
3 Liquid fuels	A variety of plants c
4 Oil	Dead animals and plants d

4 A) Put (right) or (wrong):

- (1) Gravity pulls rocks down mountainsides. ()
- (2) We store kinetic energy in our bodies that changes into chemical energy when we move. ()

B) Give a reason for each of the following:

- (1) When rocks are weathered, they break down into smaller pieces and are transported to a far place.
▶
- (2) Using renewable energy is very limited. ▶
- (3) Oxygen causes chemical weathering. ▶

Science Exam 6

1 A) Complete the sentence:

- is a type of plant that produces that causes chemical weathering.

B) Give a reason for each of the following:

- (1) Putting solar panels on the Mars Rover Curiosity.
▶
- (2)  Sometimes the fuel indicator of the car goes down.
▶
- (3) The rusting of iron in rocks. ▶
- (4) Sound energy and thermal energy are considered wasted energy in the blender.
▶

2 A) Write a scientific term:

- 📖 The remains of plants and animals that are turned into fuel over millions of years. (.....)

B) What happens when...?

- (1) 📖 Sediments settling. ▶
- (2) 📖 Water passing through black tubes. ▶
▶
- (3) Cutting down trees.
▶
- (4) The remains of marine (sea) animals are decomposed under the earth's surface.
▶

3 A) Put true or false:

- (1) 📖 Coal was formed from the remains of sea animals. (.....)
- (2) 📖 The generator transfers thermal energy into electric energy. (.....)

B) Compare water turbines and solar-powered calculators in terms of:

Wind turbines	solar-powered calculators
The source of energy that is used to operate them.	
.....	
The produced energy	
.....	

C) Mention the importance of solar heaters.

▶

4 A) Choose the correct answer:

- (1) 📖 Which of the following is a preferred natural resource to generate clean energy?
(a) River water (b) Trees and dry herbs
(c) Water, coal, and oil (d) Coal and natural gas
- (2) 📖 The formation of sand dunes in the Western Desert of Egypt is due to the movement of
(a) floods (b) winds (c) waves (d) torrents

B) Mention the energy transformation for:

- (1) Batteries ►
- (2) Windmills ►
- (3) Solar panels ►

Science

Exam

7

1 A) Complete the sentence:

- The remains of plants and animals turned to coal by and of The Earth.

B) Give a reason for each of the following:

- (1) Biofuels are renewable sources of energy. ►
- (2) Hydroelectric dams are built on rivers. ►
- (3) The deposition is a very important process. ►
- (4) Water helps in the chemical weathering of rocks. ►

2 A) Choose the correct answer:

- The canyon located in Oman is

(a) Small Canyon **(b)** Wadi Rum **(c)** Wadi Nukhr **(d)** Colored Canyon

B) What happens if ...?

- (1) Using biofuels in an unsustainable way. ►
- (2) Acid rain falls into the lakes. ►
- (3) Greenhouses aren't exposed to sunlight. ►
- (4) the calculator has solar cells. ►

3 A) Put (right) or (wrong):

- (1)  Mechanical weathering causes a change in the shape of rocks () without any change in their nature.
- (2) Windmills are used to generate electricity. ()

B) Mention:

- (1) The difference between the formation of dunes and the formation of deltas.
►
- (2) The difference between weathering and deposition.
►
- (3) Factors that cause mechanical weathering.
►

4 A) Write a scientific term:

- (1) A land area that is formed by the deposition process of sand after rivers meet a sea. (.....)
- (2) A land area that is formed by the deposition process of sand after the wind blows. (.....)
- (3) Increasing smog levels in cities. (.....)

B) Compare between canyons and valleys in terms of:

Canyons	Valleys
Example	
.....	
Formed by	
.....	
Shape	
.....	

1 A) Complete the sentence:

- Benzene is a fuel derived from

B) Give a reason for each of the following:

- (1) Concave mirrors are used in cooking food.
▶
- (2) It might be useful to recognize signs of weathering, erosion, and deposition.
▶
- (3) You feel warm when you put your hand near a lit electric lamp.
▶

C) What are the factors that increase the erosion caused by winds?

▶

2 A) Choose the correct answer:

- Weak winds can form small
 (a) Delta (b) mountain (c) sand dunes (d) canyons

B) What are the consequences of:

- (1) Breaking down of rocks. ►
- (2) Sediments settling. ►
- (3) Moving turbines with water. ►
- (4) The greater the water flow. ►

3 A) Correct the underlined word:

- (1) Strong winds can form small sand dunes on the beaches. (.....)
- (2) The generator transfers thermal energy into electric energy. (.....)

B) Define:

- (1) Energy conservation law. ►
- (2) Weathering ►
- (3) Deposition ►

4 A) Put (✓) or (X):

- (1) The increase in the water flow leads to an increase in the erosion. (.....)
- (2) Convergent mirrors are used to collect and focus sunlight for heating the pot. (.....)

B) Does the erosion happen in the desert only?

►

C) How can you describe sand castles?

►

D) How can you describe the formation of a delta?

►

Science

Exam

9

1 A) Complete the sentence:

- From the risks of acid rain

B) Give a reason for each of the following:

- (1) Mars Rover Curiosity can be operated for years.
 ►
- (2) Iron in rocks may rust. ►

(3) Formation of sand dunes on a beach.

▶

(4) There was no global warming before electricity was invented.

▶

2 A) Choose the correct answer:

-  The wasted energy in a washing machine is
(a) chemical energy (b) thermal energy (c) solar energy (d) electrical energy

B) What happens when...?

(1) Living without electricity. ▶

(2) Rivers become slow-moving. ▶

(3) We burn fuel in the power plant. ▶

C) What are the limitations of the energy chain model?

▶

3 A) Write a scientific term:

(1) The released type of energy that does not help in the device’s function. (.....)

(2) The substance that is full of small particles and cause irritation for eyes and lungs. (.....)

B) How do rocks or plants affect the formation of sand dunes?

▶

C) Describe how sand dunes are formed and why they are considered a landscape of erosion.

▶

D) Explain briefly the steps involved in operating a power plant to generate electricity for cities.

▶

4 A) Put (right) or (wrong):

(1) Lichens can be a reason for chemical weathering. (.....)

(2)  Gravity pushes rocks away from mountainsides. (.....)

B)  Why are turbines placed in dams? ▶

C) What does the red color found in some rocks represent?

▶

D)  What is a delta? ▶

Model Answer Exam (1)

- 1 **A)** plants and animals.
- B)** (1) Because they are released forms of energy that does not help in the car's main function.
(2) Because they are made from living things like plants, which are continually renewed as plants grow.
(3) Because waves are an agent of erosion that pull sand away from beaches, changing the shape of the land.
(4) Because the roots of plants grow into cracks in rocks, and as they grow, they can eventually break the rock into pieces.
- 2 **A)** Delta.
- B)** (1) The rocks rust, which is an example of chemical weathering.
(2) Chemical energy from our food is converted into kinetic energy (movement).
(3) The water erodes the sand, picking up sediment and moving it from one place to another.
(4) Over millions of years, with heat and pressure, they are turned into coal.
- 3 **A)** (1) Wrong (2) Right
- B)** (1) The energy input is the energy supplied to the device to be converted to do its job. The energy output is the energy produced by the device to do its job.
(2) - The mechanical weathering is The breaking down of rocks into smaller pieces without changing their chemical composition.
- Chemical weathering is the breaking down of rocks with changing in their chemical composition.
(3) **Oxygen:** Combines with iron → rust (oxidation).
Water: Dissolves minerals in rocks.
Acids: React with and dissolve rock materials.
Carbon Dioxide: Forms acid rain that dissolves rocks.
- 4 **A)** (1) Weathering (2) Sound
- B) • Definition :** **windmills** were used to crush grain or pump water. **wind turbines** are used to generate electricity.
• **Differences:** **wind turbines** are designed to capture wind energy and convert it to electricity more efficiently, while **windmills** are designed to grind grains.
• **Similarities:** **windmills** and **wind turbines** have large blades and both use wind power to be operated.

Exam (2)

- 1 **A)** kinetic
- B)** We should use renewable energy sources, reduce electricity consumption, such as walking, Cycling, or taking public transportation.
- C)** (1) Because weathering breaks down rocks into smaller pieces, and erosion moves those pieces from one place to another.
(2) Because the flowing (kinetic) energy of the river water can be used to turn turbines and generate electricity.
(3) Because as water runs over rocks, it dissolves some of the substances in them, causing the rocks to fall apart.
- 2 **A)** colored canyon.

- B)** (1) Deposition occurs, and new landforms like dunes or deltas can be built.
(2) The river slows down and deposits the sediment, forming a delta.
(3) It leads to the scarcity of fish, and loss of marine habitat.
(4) The acids cause chemical weathering, changing the rock's Chemical composition.
- 3 **A)** (1) V-shape (2) Weak
- B)** (1) Weathering process produces smaller pieces of rock called sediment.
(2) It generates hydroelectricity.
(3) Deposition occurs, forming new landforms.
- 4 **A)** (1) (X) (2) (✓)
- B)** It happens on beaches from waves, in rivers from flowing water, on mountains from gravity, and in deserts from wind.
- C)** It costs more money than producing energy from fossil fuels, and renewable sources like sunlight and wind are not always available.
- D)** A delta is a landform created by the process of deposition.

Exam (3)

- 1 **A)** Nile delta formation.
- B)** (1) Because this transportation is the process of erosion.
(2) Because it is the process where the eroded sediments are laid down in a new location.
(3) Because it is made from plants (wood) , which are living or recently living things.
(4) Because it is full of small particles that we breathe in, which can irritate our lungs and eyes.
- 2 **A)** erosion.
- B)** The equipment can be expensive, and the amount of sunlight varies from place to place and is not the same all the time.
- C)** No. They are similar because they are all deep, steep sided valleys formed mostly by water erosion. They are different in size, color, age, and location.
- D)** Because gravity pulls rainwater and rivers downhill, giving the water the energy and force to erode rocks.
- E)** Pollution is when harmful substances are released into the environment causing damage and health diseases.
- 3 **A)** (1) Canyons (2) Sand dunes
- B)** Wind picks up sand and carries it. When this flying sand hits rocks, it wears them down. When the wind slows down, it deposits the sand to form dunes.
- C)** Light energy (from sun) - Chemical energy (fuel) - Thermal energy (burning fuel)- Kinetic energy (spinning turbines) - Electrical energy (from the generator through the wires) - Chemical energy (battery) - Electrical energy (to power cell phone).
- D)** Weathering, erosion, and deposition.
- 4 **A)** (1) Canyons, Valleys, Deltas, Sand Dunes.
(2) Energy chain.
- B)** (1) Erosion and deposition stop, and the landform will no longer be carved by water.

(2) Solar cells in the panels catch the radiant energy and turn it directly into electricity.

- C)** Water stored behind the dam has potential energy. 2. When released, it flows down, turning turbines (kinetic energy) that spin generators to produce electrical energy.

Exam (4)

- 1 A)** Weak
B) (1) Because it forms very slowly over millions of years.
 (2) because the river deposits nutrient-rich sediment called silt there.
C) (1) CO₂ gas released from burning fuel forms a layer that traps heat inside the atmosphere, causing the Earth's temperature to rise.
 (2) Harm to human health – small particles irritate and damage the lungs and respiratory system.
2 A) (1) Erosion by Water (2) Deposition by Water
B) (1) They erode the sand and pull it away, changing the shape of the shoreline.
 (2) The chemical energy stored in the battery is used up and can no longer be converted into other forms.
 (3) It converts to heat that warms the inside of the greenhouse.
C) Explore the surface of Mars, collect data about the planet's geology, climate, and environment, and send this information back to Earth.
3 A) (1) Wadi Nakhr (2) Silt
B) Plants can trap sand with their roots, helping to stabilize a dune and increasing deposition.
C) It is formed when wind erodes sand from one place, and deposits it in another place. They are a landscape of erosion because the sand in them came from somewhere else that was eroded.
D) by helping us using clean renewable energy (solar energy)
4 A) (1) Right (2) Right
B) I would explain that over millions of years, a river used its fast-moving water to erode the rocks. Gravity pulled the water downhill, giving it the energy to carve this deep, steep-sided canyon.
C) Because erosion is a slow process that happens over long periods of time, often millions of years.
D) Both use kinetic energy to turn turbines. (Water) (hydroelectric dams) uses the flow of rivers, while (wind) uses wind to turn the blades of wind turbines

Exam (5)

- 1 A)** Coal and natural gas.
B) (1) To explore the surface of Mars, collect data, and send information back to Earth.
 (2) Because burning fossil fuels releases pollution like carbon dioxide, which causes acid rain and global warming.
 (3) Sand dunes are formed in a desert because wind erodes sand from one place, carries it, and deposits it in another place where the wind slows down.

(4) This is a result of a chemical reaction (oxidation) between the iron, oxygen (found in air), and water, which is a form of chemical weathering.

- 2 A)** Delta.

- B)** (1) Different parts of the world get different amounts of solar energy, which causes the wind to blow, as hot air rises and cool air gets down, so wind is created.
 (2) No kinetic energy will be turned to electrical energy, so no electricity will be generated.
 (3) Chemical energy from the gas is converted into thermal energy to cook food.
 (4) We would lose a source of renewable hydroelectric energy.
3 A) (1) The ability to do work or cause change.
 (2) Energy cannot be destroyed nor created from nothing.
 (3) The process of laying down or dropping sediment (such as sand, clay, and silt) in a new location after it has been carried by agents like water, wind, or waves.
 (4) Erosion process happens and the rivers erode the land.

- B)** (1) c (2) d (3) b (4) a

- 4 A)** (1) Right (2) Wrong

- B)** (1) Because this transportation is the process of erosion.
 (2) Because it currently costs more money to produce energy from renewable resources.
 (3) Because it reacts with certain elements in rocks, like iron, causing them to rust and break down.

Exam (6)

- 1 A)** Lichens , acids.
B) (1) To convert sunlight (radiant energy) into electricity to power the rover for years.
 (2) Because the chemical energy in the fuel is being converted into kinetic energy (movement) and is being used up.
 (3) This is chemical weathering caused by the reaction of iron with oxygen and water.
 (4) Because these forms of energy do not help in the blender's main function.
2 A) Fossil fuels
B) (1) Deposition occurs.
 (2) The Sun's energy heats the water because panels are made of black pipes, as water passes through the pipes, it heats up
 (3) It can lead to deforestation, harming animal habitats.
 (4) Over millions of years, with heat and pressure, they form oil and natural gas.
3 A) (1) False (2) False
B) Water turbines use the kinetic energy of flowing water as their source and produce electrical energy, while solar powered calculators use radiant energy (sunlight) as their source and also produce electrical energy.
C) they use renewable sunlight to produce thermal energy (heat) , reducing pollution, conserving fossil fuels, and providing hot water for homes.
4 A) (1) River water (2) winds

- B)** (1) Batteries: Chemical energy (inside the batteries) → Electrical energy (to operate the device).
 (2) Windmills: Kinetic energy (of wind) → Kinetic energy (of turbine) → Electrical energy (from the generator).
 (3) Solar panels: Radiant/Light energy → Electrical energy.

Exam (7)

- 1 A)** heat - pressure
B) (1) Because they are made from living things like plants, and the supply is continually renewed as plants grow.
 (2) Because the flowing (kinetic) energy of the river water can be used to turn turbines and generate electricity.
 (3) Because it builds new landforms, such as deltas and sand dunes.
 (4) Because as water runs over rocks, it can dissolve some of the substances in them.
2 A) Wadi nukhr
B) (1) If we overuse biofuels, burn all the available plants, plants will run out before they can be replaced and renewed.
 (2) It changes the chemistry of the lake water, making it more acidic. This causes fish to die.
 (3) They will not be warmed by the sun's energy, and plants may not grow well.
 (4) The calculator has solar cells to convert radiant energy (sunlight) into electrical energy to power its functions.
3 A) (1) Right (2) Wrong
B) (1) Dunes are formed by wind deposition. Deltas are formed by water (river) deposition.
 (2) Weathering breaks rocks down. Deposition lays the broken pieces down.
 (3) Water (freezing), wind, plant roots, and temperature changes.
4 A) (1) delta landform (2) sand dunes (3) Pollution

	Canyons	Valleys
Example	Grand Canyon	Nile Valley
Formed by	River erosion in dry areas	Glaciers or river erosion
Shape	Deep, narrow, steep walls	U-shaped or V-shaped, gentle slopes

Exam (8)

- 1 A)** oil
B) (1) Because they help in collecting and focusing sunlight to heat a metal pot.
 (2) By knowing how water and wind shape land, we can predict how a landscape will continue to change.
 (3) Because it can help predict how a landscape will change in the future.
 (4) Because the lamp transforms electrical energy into light and thermal energy.
C) Stronger winds and the presence of sand or other rock particles to act as tools for erosion.
2 A) sand dunes

- B)** (1) Sediment is formed. (2) Deposition occurs, building new land.
 (3) Hydroelectricity is generated. (4) The greater the erosion.
3 A) (1) Weak (2) kinetic energy
B) (1) Energy cannot be created or destroyed, only transformed.
 (2) The breaking down of rocks into smaller pieces.
 (3) The process that lays down or drops sediment in a new place.
4 A) (1) ✓ (2) ✓
B) No, It happens on beaches from waves, in rivers from flowing water, and on mountains from gravity.
C) They are made by deposition, as people deposit sand in a pile to form a structure then erosion by waves happens that damage sand castles.
D) A delta is formed by deposition. It happens when a fast-moving river carrying sediment slows down as it meets the sea, dropping the sediment to form a new land area.

Exam (9)

- 1 A)** It can kill trees, change the chemistry of lakes and kill fish, and change the chemistry of soil.
B) (1) Because it is powered by solar panels that convert the sun's radiant energy into electricity.
 (2) This is a result of chemical weathering (oxidation) of iron inside the rocks.
 (3) Wind or waves deposit sand that has been eroded from another location beyond the sea.
C) Because global warming is largely caused by the increased burning of fossil fuels to generate electricity and power vehicles, which release too much carbon dioxide.
2 A) thermal energy
B) (1) It will be harder to live without lights, electricity, computers, and so on. Still, it will leave the environment cleaner and less polluted, with less diseases caused by smog and no acid rain to damage buildings or kill fish and tree.
 (2) They deposit the sediment they carry.
 (3) Thermal energy is released, which heats water to make steam to turn turbines.
C) It oversimplifies complex energy transformations, it does not show energy loss at each step, it does not show the amounts of energy transformed
3 A) (1) Wasted energy (2) smog
B) Plants trap sand with their roots, helping to stabilize the dune.
C) Wind erodes sand from one place, carries it, and deposits it in another. They are a landscape of erosion because the sand in them came from somewhere else that was eroded.
D) A fuel is burned to release thermal energy. This heats water to make steam. The steam turns a turbine, then turbines spin the generators to convert it into electrical energy.
4 A) (1) Right (2) Wrong
B) To generate electricity (hydroelectricity) by converting the kinetic energy of flowing water into electrical energy.
C) Rust (iron oxide) caused by chemical weathering (oxidation) of iron in rocks.
D) A land area formed by deposition when a river carrying sediment enters a sea and slows down, dropping the sediment.

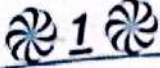
حمل الآن

مجانا وحصريا

امتحانات رقم (6)

الترم الثاني



Model Exam 	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : - (A) : - Choose the correct answer : -

- 1- When a piece of coal is burnt, energy is produced.
a) thermal b) kinetic c) sound d) potential
- 2- To reduce pollution of cars smog, we have to operate cars by
a) gasoline or natural gas b) gasoline or electricity
c) solar energy or electricity d) gasoline or coal
- 3- Most of electricity generated in Egypt is from
a) fossil fuels b) biofuels c) solar energy d) water
- 4- Rub' Al Khali sand dunes in the Arabian Peninsula are formed by
a) weathering b) deposition c) erosion d) aeration

(B) : - What happen if : -

The water in the electric power station is heated up.

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Second Question : - (A) : - Complete the following sentences using the words between brackets : -

- 1- Amount of electrical energy entering an electric mixer is
amount of kinetic energy produced from it. (equal to - more than)
- 2- Ancient people used as a form of fuel before discovering gasoline. (wind - wood)
- 3- is a weathering agent that causes land forms to change.
(Plant roots growth - Gravity)
- 4- The valley is of land. (a high area - a plain flat area)

(B) : - Give reason : -

1. When you press on the spring of a soap dispenser, the soap moves upward.

Third Question :- (A) :- put ($\checkmark$) or (X) :-

1. The movement of a generator in electric power station produces potential energy. ()
2. Gasoline is a fuel made from oil. ()
3. The flow of water can be controlled to generate electricity in dams. ()
4. A delta is formed at the mouth of a river due to deposition process. ()

(B) :- Write the scientific term :-

It is a type of weathering that changes the structure of rocks.

(.....)

Fourth Question :-

(A) :- Look to the opposite pictures then answer :-



Figure 1



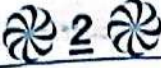
Figure 2

A) Which one of them generates the electric energy is higher?

b) What is the name of input energy to this type of turbines?

(B) :- What happen if :-

Your hand is approached to lighting electric lamp.

Model Exam 	Dakahla Governorate	Science Primary Four	Time : 1½ Hours
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Answer each of the following questions

First Question : - (A) : - Choose the correct answer : -

- 1- Mars rover "Curiosity" converts energy into and
 a) sound, light, electrical b) solar, electrical, kinetic energy
 c) chemical, light, sound d) thermal, potential, light
- 2- Both coal and charcoal of energy.
 a) are renewable resources b) are non-renewable resources
 c) are examples of biofuel d) produce thermal energy by burning
- 3- All the following are among the actions that don't conserve electrical energy, except
 a) unplugging unused electrical appliances
 b) leaving the television turned on
 c) plugging the unused electric appliances
 d) No correct answer
- 4- fossils of creatures such as whales and crocodiles are evidence of the existence of
 a) shallow water b) deep water c) mountains d) hills

(B) : - What happens if : - Exposing the solar cell of a solar water heater to the Sun. (Regarding the energy conversions) ?

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Second Question : - (A) : - Complete the following sentences using the words between brackets *

1. is the output energy from a guitar. (Kinetic - Sound)
2. Oil was formed from the decomposition of. (sea creatures -plants)
3. Delta formation is an evidence of the occurrence of the process. (deposition -weathering)

4. The rocks contain sedimentary rocks containing fossils.
(new - ancient)

(B) :- Give reason :- Chemical weathering has stronger effects than the mechanical weathering.

Third Question :- (A) :- put (✓) or (X) :-

- 1 The body stores mechanical energy from food. ()
2. Weak winds erode sand for long distances, while strong winds erode sand for short distances. ()
3. Turbines convert kinetic energy into electrical energy. ()
4. Wadi-Hitan rocks were formed as a result of weathering, erosion, and deposition. ()

(B) :- Write the scientific term :-

Energy is neither created nor destroyed, but it is converted from one form to another. ()

Fourth Question :-

(A) :- Choose from column (B) what suit from column (A) :-

(A)	(B)
1. Erosion	a. It formed when carbon dioxide gas combine with water in air.
2. Condensation	b. Use the energy of sun to heat water.
3. Acidic rain	c. A process in which water vapor change to water.
4. Solar water heater	d. The movement of sediments from one place to another.

1. 2. 3. 4.

(B) :- Cross the odd word :

Cooling – burying – heating – decomposition. ()

Model Exam  3 	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	الصف الرابع الابتدائي / مايو 2025 / نموذج امتحان الفصل الدراسي الثاني / نفس الورقة / صفحة واحدة ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : - (A) : - Choose the correct answer : -

- 1- Batteries store energy that is converted into energy.
 - a) chemical, electrical
 - b) electrical, chemical
 - c) light, chemical
 - d) electrical, light
- 2- Biofuels are
 - a) renewable
 - b) nonrenewable
 - c) made from cultivated plants
 - d) Both (a) and (c)
- 3- As the water flowing increases, the increases.
 - a) erosion
 - b) weather change
 - c) formation of sand dunes
 - d) humidity
- 4- The shape of the valley depends on many factors such as
 - a) the speed of the river
 - b) the type of rocks found
 - c) heat
 - d) Both (a) and (b)

(B) : - What happens if : - Marine organisms were buried under the Earth's surface over millions of years.

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Second Question : - (A) : - Complete the following sentences using the words between brackets *

1. is the primary source of energy on Earth. (The Sun - The moon)
2. Energy sources that are replaced after a short time of use are sources of energy. (renewable - nonrenewable)
3. Sandstone is an example of rocks. (sedimentary - limestone)

4. Canyons have sides.

(gently sloped - steep vertical)

(B) : - Give reason : -

The surface of the earth is always changing ?

Third Question : - (A) : - put ($\sqrt$) or (X) : -

1- Kinetic energy of the wind is converted into electrical energy by wind turbines. ()

2- Fossil fuel includes oil, coal, and wood. ()

3- Dams are built on rivers in order to generate solar energy. ()

4- Older rocks are found in the higher layers , while newly formed rocks are found in the lower layers. ()

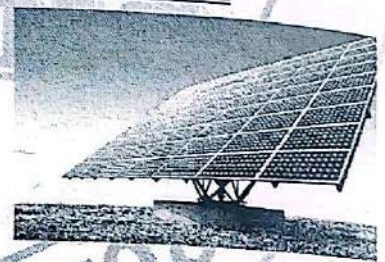
(B) : - Write the scientific term : -

A turbine that converts the energy of falling water into electrical energy. ()

Fourth Question : - (A) : - From the opposite figure : -

1. The name of this device is

2. It changes energy into energy.



(B) : - Give reason : -

Formation of delta

Model Exam  4 	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : - (A) : - Choose the correct answer : -

- 1- Sand is formed due to breaking down of
 a. wood. b. rocks. c. plastic. d. glass.
- 2- Dissolving metals forming rocks is an example for
 a. mechanical weathering. b. chemical weathering.
 c. erosion by wind. d. deposition in rivers.
- 3- is considered one of the resources that we consume at a faster rate than it is formed .
 a. Wind b. Solar energy c. Water d. Fossil fuel
- 4- The input energy that the hair dryer uses is Energy
 a. electrical b. sound. c. kinetic. d. thermal

(B) : - What happen when : - Wind doesn't blow in an area that contains many modern wind turbines.

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Second Question : - (A) : - put (√) or (X) : -

- 1- You need gasoline to move a bicycle. ()
- 2- When fuel is burned, it produces thermal energy. ()
- 3- Wind can be considered as one of the factors that cause weathering. ()
- 4- When water freezes, its volume decreases. ()

(B) : - Give reason : - We must turn off lights that we do not need.

Third Question : - (A) : - Correct the underlined words : -

1- Biofuels are from Nonrenewable resources of energy.

(.....)

2- Light energy is stored inside the battery of mobile phone.

(.....)

3- Generator is used in converting light energy to electrical energy.

(.....)

(B) : - Cross out the odd word : -

1- Weathering - Photosynthesis - Deposition - Erosion.

(.....)

2- Solar water heater - Hand mixer - Solar panel - Greenhouse.

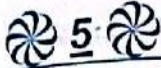
(.....)

Fourth Question : - (A) : - Write the scientific term : -

Deep valley formed by following water. (.....)

(B) : - What happen when : - Acid rain fall on rocks.

(C) : - Mention : - Energy changes in electric fan.

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Answer each of the following questions

First Question : - (A) : - Choose the correct answer : -

- 1- When a rock's surface is eroded due to weather factors, this indicates the occurrence of process
 a. weathering b. deposition c. transfer d. erosion
- 2- The produced energy from flowing water of waterfalls and dams and operating turbines is called.....
 a. mechanical energy. c. chemical energy.
 c. hydroelectric energy. d. kinetic energy.
- 3- Which of the following indicates the occurrence of chemical* weathering process?
 a. Water freezes inside rocks.
 b. Mixing the acidic water with rocks.
 c. Trees' roots grow in rocks cracks.
 d. Rocks colliding with each other as a result of water current.
- 4- Which of the following is a preferred natural resource to generate clean energy?
 a. Water, coal, and oil. b. Trees and dry herbs.
 c. Ocean and river water. d. Coal and natural gas.
- 5- What is the process in which the landforms change due to weathering factors?
 a. Expansion. b. Weathering. c. Erosion. d. Evaporation.

Second Question : - (A) : - Write the scientific term : -

- 1- A device used to convert solar energy into thermal energy.
 (.....)
- 2- A natural movement of air that results from the difference in temperature between cold air and hot air. (.....)

3- The energy produced from a battery. (.....)

(B) : - Give an example for : -

1- Fossil fuel. (.....)

2- Biofuel. (.....)

Third Question : -

(A) : - Choose from column (B) what suits it in column (A) : -

(A)	(B)
1. Canyons	a. is the ability to do work
2. Weathering	b. are natural resources of energy that take long period of time to be renewed.
3. Nonrenewable resources	c. is the breaking down of large rocks into small particles.
4. Energy	d. are deep valleys carved by flowing water.

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(B) : - What happens : -

1- To a generator that is connected to a damaged turbine in an electric power station.

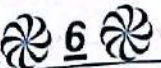
Fourth Question : - (A) : - Complete the following sentence : -

1- and from energies.

(B) : - Mention : -

1- Wasted energy when using electric lamp.

2- Changes of energy in solar panel.

Model Exam 	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
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Answer each of the following questions

First Question : - (A) : - Complete the following sentences : -

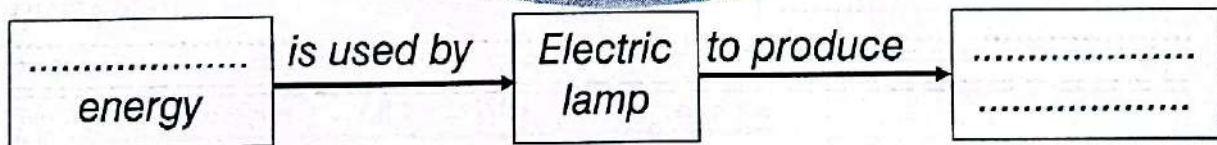
- 1- Steep valleys formed due to flowing water erosion are called
- 2- Global warming causes the raise of on the earth.
- 3- Dams are built on rivers to generate
- 4- Sand is formed due to breaking down of
- 5- Small sand dunes are formed by

Second Question : -

(A) : - Choose the correct answer : -

- 1- Which of the following energy forms isn't produced from the Sun?
 a. Thermal energy. b. Light energy.
 c. Kinetic energy. d. Radiation energy.
- 2- The formation of sand dunes in Eastern Desert in Egypt is due to the movement of
 a. floods. b. winds. c. waves. d. torrents.
- 3- is a renewable source of energy.
 a. Coal b. Natural gas c. Water d. Fossil fuel
- 4- The devices in the electric power station which operated by steam are called
 a. generator b. turbine c. tubes d. wires

(B) : - Complete the following model : -



Third Question : - (A) : - Rearrange the following steps to describe how coal is formed : -

- a- The Earth surface plants got old and died . ()
- b- The remains of the plants were decomposed and covered with sand and clay layers . ()
- c- Anciently, Earth was contained with swamps where plants grow . ()
- d- Several layers of clays and sands were deposited on the remains of dead plants . ()
- e- The buried plants were changed into coal because of heat and pressure . ()

(B) : - Give reason for : -

- 1- Iron in rocks may rust .

- 1- Some calculators use solar panels to be operated .

Fourth Question : -

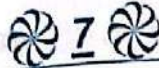
(A) : - put (√) or (X) : -

- 1- Coal was formed from decomposition of sea animals. ()

(B) : - Mention : -

- 1- Two factors make both weathering and erosion together.

- 2- The input and output energies in electric heater.

Model Exam 	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	الصف الرابع الابتدائي / مايو 2025 / نموذج امتحان الفصل الدراسي الثاني / الورقة / صفحة واحدة ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : - (A) : - Choose the correct answer : -

- The idea of design and work of the robot that explores the surface of Mars depends on the idea of transforming
 a. electrical energy to kinetic energy.
 b. potential energy to kinetic energy.
 c. light energy to electrical energy.
 d. kinetic energy to electrical energy.
- Hydroelectric energy is generated from
 a. waterfalls only
 b. waterfalls and dams
 c. biofuel only
 d. biofuel and fossil fuel

(B) : - put (√) or (X) : -

- Energy may be destroyed inside different devices. ()
- Coal was formed from the sea animals' remains. ()
- Canyon can take millions of years to be formed. ()

Second Question : - (A) : - Write the scientific term : -

- The energy used to play the drum. (.....)
- A mill that is turned by wind flow. (.....)
- Process in which rocks are broken down into smaller particles. (.....)
- It is any substance which produces thermal energy on burning. (.....)
- The process in which the laying down of sediment after its erosion. (.....)

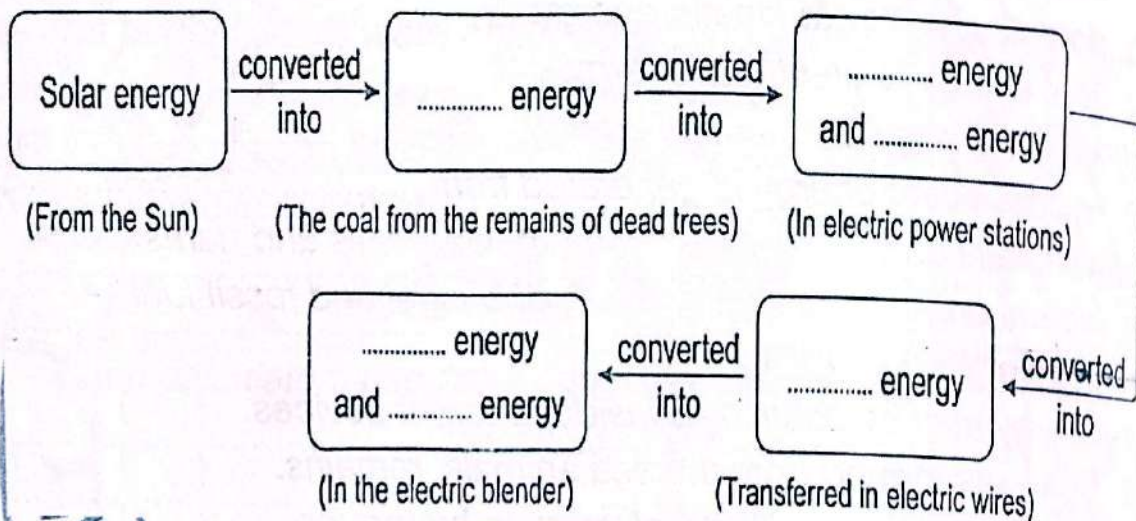
Third Question : - (A) : - What happen : -

- To the sand in a desert when wind blows by a great force .

2- The kinetic energy of a wind that is applied on the wind turbine increases.

(B) : - Complete the following model : - *

The energy chain of electric blender :



Fourth Question : - (A) : - Give reason : -

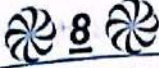
1- Wood is considered as a fuel.

(B) : - Mention : -

1- Tool that make changes opposite to changes of energy in water turbines.

(B) : - Write the scientific term : -

1- Energy neither created nor destroyed but change from one form to another. (.....)

Model Exam 	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : - (A) : - Choose the correct answer : -

1- Which of the following is a preferred natural resource to generate clean energy?

- a. Oceans and river water b. trees and dry herbs
c. water, coal and oil d. coal and natural gas

2- is a renewable source of energy .

- a. coal b. natural gases c. water d. fossil fuel

3- What is the process in which the landforms change due to weathering factors?

- a. expansion b. weathering c. erosion d. evaporation

4 - The formation of sand dunes in western desert in Egypt is due to the movement of

- a. floods b. winds c. waves d. torrents

(B) : - Complete the following model : -



Second Question : - (A) : - put (√) or (X) : -

- 1- Light energy isn't produced from the sun. ()
2- The fossil fuels Is considered one of the resources that we consume at faster rate than it is formed. ()
3- Dissolving metals forming rocks is an example for erosion by wind. ()
4- The mountain is steep and formed due to power of flowing water erosion. ()

(B) : - Give reason for : - Formation of sand.

Third Question :-

(A) :- Choose from column (B) that suits column (A) :-

(A)	(B)
1- Water	a- Generate electricity by using solar energy
2- Law of conservation of energy	b- Energy doesn't destroy or create from nothing
3 Canyon	c- Is a steep landform and formed due to the power of flowing water erosion
4- Solar panels	d- Is renewable resource of energy
1-	2- 3- 4-

(B) :- Write scientific term :-

1- The process by which sediments lay down after its erosion .

(.....)

Fourth Question :- (A) :- put (✓) or (X) :-

1- There is stored chemical energy inside food we eat. ()

(B) :- Mention :-

1- Two examples of land forms formed by effect of erosion and deposition.

(C) :- What happen to :-

1- sea creature were buried under Earth's surface over millions of years.

Model Exam 9	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	نموذج امتحان عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي (الاجابة في نفس الورقة / صفحة واحدة)		

Answer each of the following questions

First Question : - (A) : - put (√) or (X) : -

- 1- Sun is the main source of forming both biofuel and fossil fuel. ()
- 2- Biofuel is one of the nonrenewable resources of energy. ()
- 3- Both wind movement and water flow have kinetic energy. ()

(B) : - Mention two examples of : - Devices can change electric energy into thermal, sound and kinetic energy.

(C) : - Arrange the following items to : - Forms of energy when applying hydroelectric dams to generate electricity.

Electric energy, Gravitational potential energy, kinetic energy.

Second Question : - (A) : - Choose the correct answer : -

- 1- Sand is formed due to breaking down of
a- glass. b- wood. c- rocks. d- plastic.
- 2- A canyon can be formed by the effect of
a- plants. *b- animals. c- water. d- sunlight.
- 3- When you use the hand bell, the energy change to sound energy.
a- light. b- thermal. *c- kinetic. d- electric

(B) : - Give reason : -

- 1- Water is considered a renewable resource of energy.

(B) : - What happens : -

1- Solar panels are exposed to sunlight. (according to change of energy).

Third Question : - (A) : - Write scientific term : -

1- A process in which rocks are broken down into smaller particles.
(.....)

2- Landform is formed due to erosion and deposition of sand in sandy desert environment. (.....)

(B) : - Complete the following table : -

P.O.C	Windmills	Watermills
Input energy	(1)	(2)
Output energy	(3)	(4)

(C) : - Determine the wasted energies when using : -

Electric blender.

Fourth Question : - (A) : - Complete the following sentence : -

The wasted energy the produced from electric lamp is

(B) : - Classify the following into two groups : -

oil – grass – wind – gasoline – coal – water – natural gas - sun

Renewable energy resources	Nonrenewable energy resources
.....	
.....	

Model Exam  10 	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : -(A) : - Choose the correct answer : -

1- The produced energy from radio that reflects its main function is
 energy

- a. Electric b. Sound c. Light d. Chemical.

(B) : - Give reason : -

1. Coal is considered as a nonrenewable energy resource.

2. Some calculators use the sunlight to operate.

3. Water turbines are placed in waterfalls areas.

4. Iron in rocks may rust.

Second Question : - (A) : - put (√) or (X) : -

1. Water can cause the two types of weathering. * ()

(B) : - What happens : -

1. Oxygen of air reacts with iron of some rocks.

2. A river carries sediments meet a sea.

3. A small canyons if it rained a lot, water ran through it a longer time

4- To the sand in a desert when wind blows by a great force .

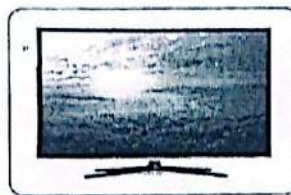
Third Question : - (A) : - Complete the following sentences : -

1. Dams control the flow of that causes the increase of the energy of water.
2. Nile River Delta in Egypt is formed due to process.

(B) : - Mention the input and output energies : -



Device (1)



Device (2)



Device (3)

	Device (1)	Device (2)	Device (3)
Input			
Output			

Fourth Question : - (A) : - Cross out the odd word : -

1. Solar water heater – Hand mixer – Solar panel – Greenhouse.
(.....)
2. Gravity – Wind – Waves – Light.
(.....)

(B) : - Write scientific term : -

1. The energy produced from a battery. (.....)
2. It is a liquid form of fossil fuel that was formed from dead marine animals. (.....)
3. A hill of sand created by the wind. (.....)

Model Exam 11	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي (الإجابة في نفس الورقة / صفحة واحدة)			

Answer each of the following questions

First Question : - (A) : - Complete the following by using the following words : - (Heat - global warming - gases - rises)

1. From the harms of using fossils-fuels, when it burned it produces that causes air pollution and trap in the atmosphere, which the temperature on the Earth that causes and change the climate of the Earth.

(B) : - Choose the correct answer : -

1- When a rock blocks the path of flying sand, a may be formed.
a- River b- dune c- canyon d- valley.

Second Question : - (A) : - Correct the under lined word : -

1. plant leaves grow inside the cracks of rocks which become wider. (.....)

(B) : - Classify the following factors into mechanical or chemical weathering : -

Oxygen gas – plant roots – wind – Acids rains

Mechanical weathering	Chemical weathering
.....	
.....	

Third Question : -

(A) : - Complete the following sentences : -

1. The electric fan converts energy into energy.

2. The stored energy in the coal is energy, while burning coal produces energy.

(B) : - Mention one example for each of the following : -

1. Fossil fuel 2. Biofuel

(C) : - Mention one of the ways to conserve the fossil fuel : -

(D) : - Compare between old and modern wind turbines : -

P.O.C.	Old wind turbines	Modern wind turbines
Function		

Fourth Question : - (A) : - Write the scientific term : -

1- Process in which rocks are broken down into smaller particles.

(.....)

2- The output energy on playing on a drum. (.....)

(B) : - Give reason : -

1. You feel heat when you put your hand close to the electric lamp.

2. Thermal energy in the mobile phone is wasted energy.

(C) : - What happen if : -

1. Sea creatures were buried under the Earth's surface over millions of years.

Model Exam 12	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : -

(A) : - Choose the correct answer : -

- the energy source in a toy car is the
a- engine b- tires c- battery d- fuel
- all the following are used to generate electrical energy, except
a- oil b- natural gas c- water d- glass

(B) : - What happens if : -

- A river erodes the sediments of mountain over a long period of time.

- you put your hands near the lighted lamp.

Second Question : -

(A) : - Give reason : -

- Generators are important in electric power station.

(B) : - write the scientific term : -

1. The energy that is used to operate a television. (.....)
2. A process in which the colors of paints of houses are changed as a result of falling of acid rains. (.....)

Third Question : -

(A) : - put (√) or (X) : -

1. All physical factors of mechanical weathering lead to breaking down of rocks. ()
2. we can make liquid biofuel from wood chips and grass. ()

(B) : - In the following table, write how each land form is caused by using the words below : - water – wind

P.O.C.	Canyons , valleys	Deltas	Sand dunes
causes			

Fourth Question : -

(A) : - Correct the underline word : -

- 1- Wadi nakhr is an example of valleys. (.....)
- 2- Small solar panels are used to supply one light bulb with sound energy. (.....)

(B) : - Complete the following sentences : -

- 1- Types of weathering can be calcified into mechanical weathering and weathering.
- 2- The electric lamp converts energy into light energy and energy.

Model Exam 13	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي (الإجابة في نفس الورقة / صفحة واحدة)		

Answer each of the following questions

First Question : - (A) : - Choose the correct answer : -

1. Some types of lamps in streets depend directly on
as a renewable energy resource in order to do its function.

a- sunlight b- petrol c- coal d- natural gas

(B) : - What happens if : -

1. A red-colored rust is formed on some rocks.

(C) : - Define : -

1. Deposition.

Second Question : - (A) : - Give reason : -

1. Valleys have different shapes.

2. Thermal energy in a mobile phone is considered as a wasted energy.

(B) : - Write the scientific term : -

1. Energy can neither be created nor destroyed, but only converted from one form to another. (.....)

=====

Third Question : - (A) : - put (√) or (X) : -

1. Limestone caves are formed by the action of mechanical weathering. ()
2. Fossil fuels that human made from corn can be replaced as quickly as it used. ()

(B) : - Compare between : -

Acid rain, Global warming. (according to the effect)

.....*

.....*

(C) : - Complete the following sentence : -

1. The input energy of a hair dryer is energy, while the output energies are energy, energy, and energy.
- =====

Fourth Question : - (A) : - What is the similarity between : -

Mechanical weathering and Chemical weathering.

.....*

.....*

(B) : - Correct the underlined words : -

1. There is a stored thermal energy inside the food we eat. (.....)
 2. Erosion is the process of laying down of sediments. (.....)
-*
-*

(C) : - Give reason: -

1. Coal is nonrenewable energy resources.
-*
-*
- =====

2. Generators are important in electric power stations.

Third Question : - (A) : - put (√) or (X) : -

1. Wind energy will run out faster than natural gas. ()
2. Weather is the breaking down of rocks on Earth's surface into smaller pieces. ()

(B) : - Mention : -

Two factors make both weathering and erosion together.

(C) : - Write the scientific term : -

Transportation of small pieces of rocks from place to another.
(.....)

Fourth Question : - (A) : - Complete the following sentence : -

1. Chemical reaction between iron and causes its rusting.

(B) : - Mention : -

Three ways to conserve fossil fuel.

(C) : - What happen if : -

Charge of batteries of remote controlled toy car run out.

Model Exam 15	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : - (A) : - Complete the following sentence : -

1. The remains of plants are converted to coal under the effect of and underground.

(B) : - Compare between : -

P.O.C	Coal	Charcoal
Type of fuel		

P.O.C	Delta	Sand dunes
Place of formation		

Second Question : - (A) : - Write the scientific term : -

1. Any substances which produce thermal energy on burning.
(.....)

2. The movement of sediments from one place to another.
(.....)

(B) : - Give one example for each of the following : -

1. Renewable resources. (.....)

2. Mechanical weathering. (.....)

3. Wasted energy in some devices. (.....)

Third Question : - (A) : - Choose the correct answer : -

1- Increasing the amount of .. gas in the air causes global warming.

a. carbon dioxide b. oxygen c. water vapor d. nitrogen

2-Clouds are formed due to the then of water in rivers and seas.

- a. evaporates b. condenses c. freezing d. a and b

3-The plant converts energy into energy in the form of sugars

- a. electrical – light b. light – chemical
c. light – sound d. chemical – light

(B) :- Give a reason :-

1. Rusting of iron of some rocks.

.....
.....
=====

Fourth Question :- (A) :- put (✓) or (X) :-

1. Canyon is formed by wind. ()
2. In greenhouse the radiant energy from sun convert to electric energy. ()

(B) :- Classify :-

plants roots – iron rust – formation of limestone caves – movement of wind

Mechanical weathering	Chemical weathering
.....	
.....	

(B) :- What happens when :-

1. The concave mirror used in cooking.

.....
.....
=====

Model Exam 16	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : - (A) : - Complete the following sentence : -

1. The outputs in hair dryer are and energies.

(B) : - Give reason : -

1. Valleys have different shapes.

2. The waves cause the beach erosion.

(C) : - Mention : -

1. Two factors that affect on the Earth's surfaces.

2. The causes of air pollution.

Second Question : - (A) : - Write the scientific term : -

1. Rain that formed by combination carbon dioxide with water vapor of air. (.....)

(B) : - What happen if : -

1. Making deforestation.

2. Rocks are broken into small pieces.

3. A river stream enters a sea.

(B) : - Show the energy path way from input to output in radio :-

Third Question : - (A) : - put (√) or (X) :-

1. Rivers cause less erosion of rocks than small streams. ()
2. All canyons must have V-shape. ()

(B) : - Give Reason : - 1. Iron in rocks may rust.

2. You feel heat when you hold your hand near to light bulb.

(C) : - Determine the causes of global warming :-

Fourth Question : - (A) : - Choose the correct answer :-

1. Coastal rocks are formed by period of time. (Long - short)
2. Wind is from energy resources. (renewable - non renewable)

(B) : - Compare between :-

1. Biofuel and Fossil fuel (according to type of energy resource).

(C) : - What happen if :-

1. Lichens growing on rocks produce acids.

Model Exam 17	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : -

(A) : - Complete the following sentences : -

1. Formation of limestone caves is an example of weathering.
2. When you rub your hands together, the energy is converted into energy.
3. In any energy chain, some of the energy is wasted in the form of
4. Dams control the flow of, that causes the increase of the energy of water.

(B) : - Cross out the odd word : -

Wood – Charcoal – Wood chips – Oil. (.....)

Second Question : - (A) : - put (✓) or (X) : -

1. The amount of oil on Earth is limited. ()
2. Energy may be destroyed inside different devices. ()
3. Both canyons and valleys often have river in their bottom. ()
4. Deposition process never changes the shape of the land. ()

(B) : - What happen when : -

Sunlight falls on solar panels.

.....

.....

.....

=====

Third Question : - (A) : - Write the scientific term : -

1. A type of electrical energy generated by water turbines in dams.
(.....)
2. The liquid that stores chemical energy and it is used to move cars.
(.....)
3. A fuel that is produced from remains of dead animals and plants under the earth's surface.
(.....)
4. A mill that is turned by water flow.
(.....)

(B) : - Correct the under line word : -

1. Plants roots help in the formation of rocks. (.....)

Fourth Question : -

(A) : - Choose from column (B) that suits column (A) : -

A	B
1. Water	a. can made in few hours from sand particles on seashores.
2. Acid rain	b. is deep valley carved by flowing water.
3. Canyon	c. is a liquid renewable resource of energy.
4. Sandcastle	d. is formed when carbon dioxide gas combines with water in the air.

1. 2. 3. 4.

(B) : - Give reason : - Iron in rocks may rust.

.....

.....

.....

=====

Model Exam 18	Dakahla Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي (الاجابة في نفس الورقة / صفحة واحدة)		

Answer each of the following questions

First Question : - (A) : - put (√) or (X) : -

1. Energy may be destroyed inside different devices. ()

(B) : - Give reason : -

1. Iron inside rock may be rust.

(C) : - Correct the underline word : -

1. Delta are formed by weathering process. (.....)

Second Question : - (A) : - Choose the correct answer : -

1. In water turbines energy of water is changed into electrical.
a. Light b. kinetic c. thermal d. potential

(B) : - What happen when : -

1. You burn piece of wood. (According to changes of energy).

2. The amount of carbon dioxide increase in the atmosphere.

Third Question : -

(A) : - Write the following words in the blanks to correctly identify each landform : -

(Canyon – sand dunes – river – wind)

1. are deep valleys with steep sides.
2. Are hills that are made of sand.
3. are often what cause the formation of both valley and canyon.
4. and sand work together as force of erosion in the desert

(B) : - Cross out the odd word : -

1. Gasoline - coal - wood - natural gas. (.....*)
- =====

Fourth Question : -

(A) : - Write the scientific term : -

1. The energy produced from playing guitar. (.....)
2. The process by which sediment lay down after its erosion. (.....)
3. It used to convert wind energy into electrical energy. (*) (.....)

(B) : - Trace the energy chain : -

1. produce light energy used by plants converted trees into energy.
- =====

Model Exam 19	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الإجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : -

(A) : - Choose from column (B) that suits column (A) : -

A	B
1. Water	a. Generates electricity by using solar energy.
2. Law of conservation of energy	b. Energy doesn't destroy, nor create from nothing.
3. Canyon	c. Is steep landform and formed due to the power of flowing water erosion.
4. Solar panels	d. Is a renewable resource of energy.

1. 2. 3. 4.

(B) : - Complete the following sentences : -

1. Wood and are examples of biofuel.
2. The electric fan converts electrical energy into energy.
3. Global warming causes the rise of on Earth.

Second Question : -

(A) : - Write the scientific term : -

1. They are lowland areas that have gentle sloped sides.
(.....)
2. A mill that is turned by wind flow. (.....)
3. It is the output energy that does not help the device do the function for which it was designed. (.....)

(B) : - Classify the following factors that cause weathering in the table below : -

1. Wind.

2. Acids

3. Oxygen gas:

4. Temperature

Mechanical weathering	Chemical weathering
.....	
.....	

Third Question : - (A) : - put (√) or (X) : -

1. Canyons are special types of valleys that have steep sides. ()
2. A generator changes the kinetic energy into electrical energy. ()
3. Delta is formed by the effect of the weathering process only. ()

(B) : - What happens if : -

1. The amount of carbon dioxide gas increases in the atmosphere.

Fourth Question : - (A) : - What happens : -

1. When blades of wind turbines rotate faster.

2. To the changes of energy when you turn on the television.

(B) : - Write the scientific term : -

1. Gas react with iron forming rust. (.....)

Model Exam  20 	Dakahlia Governorate	Science Primary Four	Time : 1½ Hours
	Educational Directorate	2 ND Term May 2025	توجيه عام العلوم لغات
	نموذج امتحان الفصل الدراسي الثاني / مايو 2025 / الصف الرابع الابتدائي ((الاجابة في نفس الورقة / صفحة واحدة))		

Answer each of the following questions

First Question : - (A) : - Complete the following sentences : -

1. The shape of coastal rocks is affected by the force of and wind.
2. Water flow through turbines in dams to generate energy.
3. includes grass, charcoal and liquid fuel.

(B) : - Give reason : -

1. Water plays an important role in the formation of limestone caves.

(C) : - Write the scientific term : -

1. The main source of energy on the earth surface. (.....)

Second Question : -

(A) : - Correct the underlined word : -

1. Carbon dioxide gas in the air reacts with the iron of some rocks forming iron rust. (.....)

(B) : - Classify the following factors that cause weathering in the table below : -

1. Wind.
2. Acids
3. Oxygen gas.
4. Temperature

Mechanical weathering	Chemical weathering
.....	
.....	

(B) : - put (√) or (X) : -

1. Delta is formed by the effect of the weathering process only. ()
2. We have to conserve all forms of fuel. ()
3. Machines make our life more easier. ()

Third Question : - (A) : - Choose the correct answer : -

1. When you use the hand bell, the energy changes into sound energy.

a- light b- thermal c- kinetic d- electrical

2. Extreme heat and pressure under the earth's surface has an important role in forming

a- wood b- wind c- fossil fuel d- biofuel

3. From factors of mechanical weathering

a- oxygen b- acid rain c- temperature d- acid of lichens

(B) : - Complete the following table : -

	Used energy	Produced energy
1- Solar panels 		
2- Wind turbines 		

Fourth Question : - (A) : - put (√) or (X) : -

1. Canyons are special types of valleys that have steep sides. ()

2. A generator changes the kinetic energy into electrical energy. ()

3. Delta is formed by the effect of the weathering process only. ()

(B) : - What happens if : -

1. The amount of carbon dioxide gas increases in the atmosphere.
.....

(C) : - Determine : -

2. The input and output energy in a green house.
.....
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كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

